NOVEMBER 7, 1966

Special African Issue
including a 5-page
geography and map

FOREIGN AGRICULTURE

Including FOREIGN CROPS AND MARKETS

A WEEKLY MAGAZINE OF THE UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE

FOREIGN AGRICULTURE

Including FOREIGN CROPS AND MARKETS

NOVEMBER 7, 1966

VOLUME IV • NUMBER 45

Nothing is more typical of Africa than the local market, such as this one in Gombe, Nigeria, where cotton and other agricultural products are sold.

Contents

Foreign Agriculture is published weekly by the Foreign Agricultural Service, United States Department of Agriculture, Washington, D. C. 20250. Use of funds for printing this publication has been approved by the Director of the Bureau of the Budget (December 22, 1962). Yearly subscription rate is $7.00, domestic, $9.25 foreign; single copies are 20 cents. Orders should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20401.

Cocoa warehouse, Port of Lagos, Nigeria

Coffee, cotton, cocoa —the "big three" of Africa's Agricultural Trade

The growth of Africa's agricultural trade over the past decade has been substantial. Annual exports of agricultural products have passed the $4-billion mark; they were barely over $3 billion 10 years ago.

At the top of the African agricultural export list is coffee. Ten years ago cotton headed the list. In 1964 Africa's coffee exports totaled $601 million. Back in 1955 they were $357 million. (See short article on page 18.)

Now relegated to second place is cotton. The 1964 cotton exports amounted to $531 million. Cotton exports, however, have not shown growth in value during the past decade. Instead, they have fluctuated around $500-$600 million. Until recently this level was large enough to keep cotton in first place among African exports.

The premier cotton exporter of Africa is the United Arab Republic (Egypt), accounting for nearly 50 percent by value of the continent's cotton exports but only a little over 40 percent by quantity. Next in cotton-exporting importance is Sudan, and far below that country is Uganda, in third place.

The third of the Big Three commercial crops of Africa (see chart on page 24) is cocoa. By exporting cocoa beans valued at some $425 million in 1964, Africa claims about four-fifths of the world's export market. Back in 1955, African cocoa bean exports were valued at around $387 million. This apparent small increase may be misleading as to the fecundity of African cocoa trees because of the wide swing in export prices. More indicative is volume, for on a quantity basis Africa's cocoa bean exports have moved up from around 475,000 metric tons in 1955 to 844,000 in 1964, with a high of 861,000 tons in 1962.

New York spot Accra cocoa prices during the last decade have bounced around between a monthly high of 48.9 cents per pound for July 1958 and a low of 11.8 cents average in July 1965. Virtually half of the cocoa beans exported from Africa come from Ghana. Next largest exporter is Nigeria, followed by Ivory Coast and Cameroon.

Other commodities from Africa's agriculture which are exported in significant quantities include peanuts, oil palm products, wine, fresh and canned fruits, and wool. Wool is the most important agricultural export from the largest agricultural producer on the continent—The Republic of South Africa.

Wheat is biggest agricultural import

Africa's annual imports of agricultural commodities have grown steadily and now exceed $1.5 billion. Approximately 20 percent of this amount is wheat and wheat flour, which constitute the largest agricultural import for the continent. Most of the wheat and flour imported goes to the countries in northern Africa. The United Arab Republic, in particular, needs to import wheat and is by far the largest wheat importer in Africa. Its wheat deficit may reach 2.5 million tons this year if the accustomed level of consumption is maintained.

Wheat imports by central and west African countries are expanding significantly. These areas do not produce enough wheat to accommodate their growing demand for wheat products. Also, in the past few years several flour mills have been opened, and this has prompted a shift in imports from flour to wheat.

Sugar, vegetable oils, and rice are substantial agricultural imports of Africa. Dairy products to help plug the animal-protein dietary gap that exists throughout most of Africa are also quite important.

The United States agricultural trade with Africa has been rising at a lively clip. In the year ending June 30, 1966, U.S. farm exports to African countries totaled $347.3 million (including shipments under Public Law 480), while our imports of agricultural commodities from Africa were at $520.3 million.

Although the United States exports farm products to some 50 African countries, in fiscal year 1966 more than one-third of these exports went to the United Arab Republic, and this was a somewhat smaller share than in some previous years. The story of these exports to the UAR is largely one of concessional sales under P.L. 480—mostly wheat and flour.

Wheat is the leading U.S. agricultural export item both in value of shipments and in number of African countries to which shipments were made. In fact, in recent years wheat and wheat flour have constituted virtually half of all U.S. agricultural exports to Africa. Gaining in popularity, though, is rice. Back in 1960 about $7 million worth of U.S. rice was sold to Africa; by 1964 this figure had increased to $40.2 million. The Republic of South Africa was the big buyer, taking 25 percent.

Tropical products sold to U.S.

Africa's tropical products, which complement U.S. farm output, make up most of the United States imports from Africa. Coffee is by far the largest. In 1965 the United States purchased African coffee valued at $246 million—or 52 percent of the value of all African agricultural products imported last year. Cocoa imports amounted to $80 million and accounted for 17 percent of the total value, a percentage that undoubtedly would have been larger had 1965 not been a year of depressed cocoa prices.

Nothing else in the wide array of African agricultural products—wool, rubber, hides, sisal, karakul skins, spices, pyrethrum, and essential oils are a few of them—can challenge the top positions of coffee and cocoa in Africa's sales to the United States. Nor is any other commodity apt to replace wheat as the No. 1 U.S. farm export to the African continent. These three crops are the backbone of U.S.-African trade.

—Robert E. Marx
Foreign Regional Analysis Division, ERS

Northern Africa Seeks the Key to Economic Growth

Despite extensive irrigation and land-improvement schemes, agriculture in Northern Africa still lags behind most other sectors of the economy.

By CAROLEE SANTMYER
Foreign Regional Analysis Division
Economic Research Service

The five nations that make up Northern Africa see inadequate agricultural development as one of their greatest obstacles to satisfactory economic growth. Aided by the United States and other countries, they have been working to correct this situation, but unpredictable weather, a soaring population growth rate, and other persistent problems have thus far kept results below the desired level.

Northern Africa—the United Arab Republic (Egypt), Libya, Tunisia, Algeria, and Morocco—covers more than 2.2 million square miles, or about three-fourths the area of continental United States, but roughly 84 percent of this region is wasteland and desert. To compound this problem, population—growing at slightly under 3.0 percent annually —displaces gains in both agricultural productivity and national development and promotes general underemployment, unemployment, and expanding food deficits. Also, the movement of people from rural to urban areas in recent years has added to urban housing and employment pressures while reducing the supply of skilled farm labor.

A number of other unfavorable conditions persist throughout the area, crippling economic growth. Some of the most outstanding are insufficient foreign exchange (except in Libya), lack of technically skilled personnel, a shortage of farm credit, inefficient utilization of available water supplies, overgrazing of available pastures, and a shortage of productive crop seeds.

Together, or separately, these problems result in frequent production setbacks, such as the 1966 drought which cut agricultural production in all Northern Africa except the United Arab Republic. This drought dropped grain production some 30 percent below the average annual level of about 11.5 million metric tons, causing a jump in grain import requirements for 1966-67. It also seriously damaged the pulse crop and led to increased sales of—and sharply lower prices for—livestock.

In response to Northern Africa's problems, many countries have given technical and financial assistance in the past 2 decades. The United States, for instance, supplies extensive aid under the various titles of its Public Law 480 program.

U.S. farm exports to the region, including P.L. 480 commodities, totaled around $264.6 million in 1964 and about $172.5 million in 1965, respectively accounting for around 4 percent and 3 percent of all U.S. agricultural shipments. The United Arab Republic received the lion's share of these exports—over 70 percent in 1964 and about 56 percent in 1965. Libya, on the other hand, took less than 1 percent of U.S. agricultural exports to the area in 1964 and slightly over 1 percent in 1965; however, Libya is a growing cash market for all exports as the result of its expanding petroleum sales.

Major U.S. agricultural exports to Northern Africa are grains, vegetable oils and fats, tobacco, and tallow.

Leading U.S. agricultural imports from the area are cotton, olives and olive oil, hides, skins, wool, animal hair, drugs, spices, and herbs. In 1965 U.S. agricultural imports from Northern Africa amounted to less than 5 percent of the area's total farm exports.

During the next few years, agricultural production of food within the region will continue to fall below local needs, unless agricultural inputs are greatly improved, and agricultural imports will increase. The trend of agricultural exports will probably shift more heavily toward citrus, vegetable oils, winter vegetables and fruits, and away from wine.

The United Arab Republic

Agricultural growth in the United Arab Republic (Egypt), even with land reclaimed by the High Dam

A Moroccan farmer plows his land near the Chellah, ancient fortress of Rabat.

Farmer, above, proudly displays a bunch of Tunisian bananas, grown as part of the country's program of agricultural diversification.

Even simple hand tools such as these (above) are an improvement over the farming implements often used in Libya. Below, wool market at Rabat, Morocco.

waters, is expected to barely keep pace with the country's 2.7 percent annual population growth. Agricultural production had increased 19 percent from 1960 to 1965, but per capita production had risen only 2 percent.

Present Egyptian hopes for economic expansion rest heavily with the producing oil wells in the Gulf of Suez, potential oil fields of the Western Desert, and future industries geared to local consumption and raw materials. The UAR is also planning to expand Port Said as a free-trade and industrial zone, making it similar to the one in Panama. This would increase the flow of convertible currencies into the country.

Currently, life and agriculture in the UAR are strongly affected by tradition and the lack of capital for national development. Nowhere is this more obvious than in the green, lush Nile Delta. Here, irrigation is accomplished much as it was in the days of the Pharaohs, with ox-powered water pumps or lift buckets. Robed women gracefully balance large jugs and bundles upon their heads as they walk along the region's paths and highways, and small donkeys labor—as they do throughout all of Northern Africa—under immense burdens of produce.

Historic methods of cutting, hauling, and threshing grain are also common in the delta. Grain is hand cut, bound into bundles, and loaded in haystack fashion upon complacent camels, which trudge slowly from the fields to the threshing area. It is threshed on the flat ground and then winnowed by hand to separate the chaff. Egypt is planning, however, to mechanize the production and harvesting of cotton and orchard crops.

Rural Egyptians are migrating to urban areas in search of higher wages and improved living conditions. This, in addition to population growth, increases the demand for purchased food.

The UAR imports roughly one-quarter of its domestic food needs, and if the present levels of consumption are to be maintained, the import trend cannot be reversed in the foreseeable future. The UAR's leading export by value is cotton, totaling between $250 million and $400 million annually.

Libya

Only 28 million acres of agricultural land separate the Mediterranean Sea from the shifting sands of Libya's vast southern desert. Extending from Tunisia to the UAR, this thin stretch of arable land contains 95 percent of the country's 1.7 million people.

Most Libyans are either farmers or nomads; however, since the discovery of petroleum in 1959, there has been a decided shift of population from rural to urban areas.

As in Egypt, the people seek better living conditions and higher wages, but agriculture has suffered in the process, and imports of agricultural items have been increasing. Once a net exporter of animal products, Libya is now a net importer of meat.

As employment and wages expand, so does local demand. The result has been soaring prices and supply deficits. Total imports in 1965 reached $114 million—$14 million of them agricultural goods. Exports totaled $282 million, of which less than 1 percent were agricultural items. This contrasts sharply with 1955 when total imports were $40 million, over one-third agricultural; and exports amounted to $12 million, 80 percent agricultural.

The Government of Libya is offering numerous services to farmers to encourage agricultural growth, but the results of this program are not yet apparent. In general, the country still has a great demand for foreign technical assistance to promote sound development practices.

Tunisia

Although mining is of importance, Tunisia's economy is basically agricultural. The north and north-central parts of the country are best suited to field crops, while south-central and southern Tunisia favor olives, dates, and livestock. Until this summer the Medjerda River in northern Tunisia was considered to be the major water supply; however, a promising underground source has been tapped 250 miles south of Tunis near El Hamma and this may offer substantial agricultural possibilities for central and southern Tunisia.

The country usually imports much more than it exports, and roughly half of its trade is with France. The United States is normally its second largest supplier, with most agricultural items shipped under Public Law 480. Grain, sugar, and dairy products are Tunisia's leading agricultural imports; olive oil, wine, fruits, and animal products are the leading exports.

The government is earnestly trying to develop the nation according to its best potentials and those of its people, but the country needs additional technical assistance and training programs at all levels. The present agricultural development programs are planned around the service cooperative and the cooperative farm unit.

The 1965-68 development plan calls for a total investment of $865 million, almost 40 percent financed by foreign capital.

U.S. aid to Tunisia had totaled $468.5 million by fiscal 1966. There are currently 17 countries besides the United States with some type of aid program in Tunisia, attesting to the country's ability to attract external assistance.

Algeria

Desert, mountains, and wasteland occupy about four-fifths of Algeria's 920,000 square miles. Although production of petroleum and natural gas is the nation's largest industry, agriculture supplies approximately one-fourth of the nation's income and employs roughly 80 percent of its 11 million people.

Traditionally, wine shipped to France has been the country's most valuable agricultural export, but sales have dropped in recent years because of European competition and a decrease in wine quality. Even though Algeria plans to standardize its product, prospects for future wine exports are uncertain, and some vineyards may be replaced with cotton, legumes, forage, or sugarbeets. Exports of citrus, especially oranges, have remained strong, but growers are having some difficulties with fruit fly. There is also a ready French market for Algerian mutton, when it is available for export.

In favorable crop years, Algeria produces large amounts of grain. The 1965 crop was good even in marginal areas, but in 1966 wheat and barley each fell about 500,000 tons.

There are two types of farms in Algeria—the socialist-autogestion sector, which covers about 5.7 million acres, and the traditional sector. Land previously owned by colonists is being farmed traditionally by former employees; however, a land reform program, due to be in full operation by 1967, will bring all except the smallest plots of cultivated land under the communes or rural councils.

In other areas of national development, Algeria has extended its oil pipelines and has reached agreements with France regarding petroleum sales and French national assistance. Algeria has hopes of using its gas and oil reserves to promote industrialization.

Morocco

Morocco lies less than 8 miles off the southern coast of Spain and within a stone's throw of the Rock of Gibraltar. Its pleasant Mediterranean climate has for many years encouraged a growing tourist industry, especially in the port cities of Tangier and Casablanca.

In addition to tourism, the country's economy is fed by agriculture, manufacturing, and mining. Agriculture provides about 30 percent of the nation's gross national product. Food processing, representing roughly two-fifths of total industrial production, is the nation's most important industry, followed by metal working and textiles. Phosphates account for 60 percent of the value of all minerals mined in Morocco.

A majority of the population lives in rural areas and depends upon agriculture for a livelihood. Most farms produce at the subsistence level for local consumption. However, a modern agricultural sector covers about 3.2 million acres; it is largely French owned and yields export crops. Average farm size here is slightly over 500 acres, far greater than the 5 to 25 acres of the traditional farm. In contrast to most countries in this area, Morocco has nationalized very little of its agriculture.

By value, Morocco's largest agricultural exports are citrus fruit, vegetables, wine, and canary grass. Imports are wheat and wheat flour, sugar, tea, and dairy products.

In keeping with national development goals, the present 3-year plan (1965-1967) calls for a total investment in the economy of $688 million, with primary emphasis upon agriculture, tourism, and technical training in industry. The plan will depend heavily upon the external financial assistance of the many nations that have provided aid in recent years. Total U.S. economic aid to Morocco, fiscal 1957 through fiscal 1965, reached $484 million. Morocco has the natural assets for long-run development; however, economic growth will probably continue its irregular pattern until agriculture realizes a firm trend toward modernization.

African Oilseeds Rate High As Foreign Exchange Earners

By LYLE E. MOE
Foreign Regional Analysis Division
Economic Research Service

Africa is the world's leading supplier of peanuts, palm oil, and palm kernel oil. These products rank third, fourth, and sixth, respectively, on an oil-equivalent basis, in world oilseed and vegetable oil trade. The continent also exports significant quantities of olive oil, sesameseed, and cottonseed.

Because of the interchangeability of different fats and oils in the food and industrial markets, the production of vegetable seed and oil products in Africa has an important influence on the price the American farmer receives for his soybeans or cottonseed.

Peanut exports on the rise

Africa, the largest exporter of peanuts and peanut products since World War II, accounted for 85 percent of the 1965 world trade in peanuts and 68 percent of the trade in peanut oil. Its peanut shipments that year, at 1.8 million metric tons (unshelled basis), were 16 percent above their 1955-59 average. (1965 figures are preliminary.) Exports of peanuts as such have not been rising as fast as production because of increased domestic crushing and, consequently, increased exports of oil. In 1965, the total production was 4.95 million tons, or 34 percent more than the 1955-59 average.

Peanuts, in general, are grown in specialized production areas where they are by far the major source of cash income for farmers and where there are few or no alternative commercial crops. In many parts of Africa the increase in population and consequent demand for cash crops has caused a considerable shortening—and sometimes elimination—of the fellow period; this in turn has led to heavy soil depletion. Fertilizer is used only in limited quantities, and production and harvesting procedures are generally primitive. The greatest single influence on yields and total production continues to be the weather.

Nigeria is easily the world's leading producer and exporter of peanuts. Exports in 1965 totaled 744,000 metric tons, unshelled basis, worth \$133.8 million. Production is expected to increase moderately during the next decade.

Senegal, the world's second largest peanut exporter, derives approximately 80 percent of its export earnings from peanuts and peanut products. These export earnings have traditionally come from France, which pays about 20 percent more for Senegalese peanuts than do other countries. However, Senegal's association agreement with the European Economic Community calls for prices to be reduced to world levels. This change, of course, will put a severe strain on Senegal's economy.

Other leading peanut exporters in Africa are the Sudan and Niger.

The valuable oil palms thrive in the forested coastal

Left, picking peanuts in Northern Nigeria (picture courtesy of the Regional Research Station at Samaru). Lower left, Liberians try out a new palm-nut-cracking machine. Plantation (below) on the Ivory Coast is one of Africa's few coconut palm plantations.

area of West Africa, extending up to 150 miles or more inland. Only a few large oil palm plantations, such as are found in the Congo (Kinshasa), have been established, and most of the palm products are processed from fruit of trees that grow wild.

The palm fruit grows and is gathered in bunches consisting of as many as 1,500 individual fruits per bunch. Palm oil is obtained from the outer fleshy pulp of the mesocarp of the fruit. The nut of the fruit contains a kernel which, when crushed, produces palm kernel oil. The two oils are of different chemical composition and have different end uses.

Palm oil, like peanuts, is an important food crop in Africa. The total volume of palm oil produced in most African countries is not known, but the greater part of the marketed palm oil is exported. In 1965 Africa exported 273,700 metric tons, or 51 percent of world trade. Indonesia and Malaysia accounted for the remainder.

Palm oil exports declining

Africa's 1965 shipments of palm oil were, however, 26 percent below the 1955-59 average as a result of changes in the major exporting countries—Nigeria and the Congo. In Nigeria growing domestic demand for palm products has led to a drop in exports, while in the Congo internal disturbances have disrupted production and trade. There appears little likelihood of a significant recovery of the Congolese palm oil industry in the near future.

In the past 5 years Africa has supplied practically all of the palm kernel oil and 93 percent of the palm kernels entering world trade. While nearly 20 African countries export palm kernels, Nigeria—the world's leading exporter—accounts for over 60 percent of the African total. Palm kernel exports have been declining as various countries have been increasing their crushing capacity and exporting the palm kernel oil.

During the next decade African production of palm oil products is expected to increase at a slower rate than that of peanuts. Relatively little capital is required to increase production of peanuts since the major inputs are land and labor which are in relatively plentiful supply; but setting up new oil palm plantations requires large amounts of capital—as does the development of natural palm groves. This capital is generally not available.

Africa also ranks high in world production of and trade in several other oil-bearing materials. Nearly 40 percent of the world's trade in olive oil in 1965 originated in Africa, with Tunisia by far the largest exporter. Africa produces over one-fifth of the world's sesameseed but accounts for more than three-fourths of the world sesameseed export; the Sudan is the world's leading exporter of this commodity. Nigeria and Sudan are the world's second and third largest exporters of cottonseed. Ethiopia accounts for about 5 percent of the global trade in flaxseed.

Moroccan Citrus Exports Set Record Short of Expectations

Last year Morocco exported some 447,200 tons of citrus—a 4-percent increase from 1964-65 and a record for Morocco but somewhat short of what forecasters had predicted. Possible explanations for the smaller exports include the higher degree of insect damage and problems of selling to the European Economic Community.

Each year exports of citrus have accounted for more and more of Morocco's foreign exchange, the result of steady increases in production. In the 1965-66 season some 621,000 tons of citrus—oranges, lemons, and grapefruit—were produced, 17 percent more than a year earlier.

This year, however, fruit was plagued by attacks of fruit flies, and Mediterranean red scale was said to have been relatively severe. About 25 percent of the crop was culled as a result of damage and unsightly marks on the fruit; previously less than 20 percent had been culled.

In addition, there were some indications that Morocco's Office of Commerce and Exporters (OCE) was not well enough organized to handle exports at the start of the season. (The agency was formed last year when handling of citrus exports became a function of the national government.) Reportedly some sales of early fruit were missed.

Late oranges did not sell as well as had been expected because of competition from Spain. Furthermore Morocco was forced to exercise extreme caution in shipping to EEC countries—traditionally good market for Moroccan citrus—to keep the prices of Moroccan fruit in the EEC market from falling below the minimum entry price.

While requirements of the Community apparently slowed exports somewhat, they probably helped Morocco obtain higher average prices. Higher prices pushed the total value of Morocco's exported crop to almost $70 million.

MOROCCO'S CITRUS PRODUCTION

Variety of citrus	1964-65	1965-66	1966-67[1]
Oranges:	*Metric tons*	*Metric tons*	*Metric tons*
Sweet:			
Navels	158,500	191,200	209,800
Fines	31,500	23,300	29,550
Sanguines	62,000	83,665	90,262
Commons	3,500	1,600	2,900
Tardives	187,500	221,300	248,850
Total	443,000	521,065	581,362
Tangerine-type:			
Clementines	46,750	59,930	68,175
Mandarines	20,500	15,415	27,025
Total	67,250	75,345	95,200
Total oranges	510,250	596,410	676,56.
Grapefruit	12,250	15,975	17,255
Lemons	7,500	8,715	8,985
Total citrus	530,000	621,100	702,802

[1]Forecast. Association of Citrus Producers (ASPAM).

MOROCCO'S CITRUS EXPORTS

Variety of citrus	1964-65	1965-66
Oranges:	*Metric tons*	*Metric tons*
Sweet:		
Navels	120,546	94,000
Fines	26,582	33,049
Sanguines	54,063	66,812
Commons	2,228	1,457
Tardives	158,126	178,889
Total	361,545	374,207
Tangerine-type:		
Clementines	42,137	50,262
Mandarines	19,968	15,034
Total	62,105	65,296
Grapefruit	4,545	4,562
Lemons	1,469	3,135
Total citrus	429,664	447,200

Association of Citrus Producers (ASPAM).

Changing AFRICA: A New Agricultural Geography

The colonial chessboard of 1950 when just four countries were independent has been transformed into 39 free nations, with only a handful of colonies.

By SNIDER W. SKINNER
Foreign Regional Analysis Division
Economic Research Service

Just a little over 5 years ago, in its May 1961 issue, this magazine published "The New Geography of Africa." While accurate and timely at the time, that map and text have now been outdated by the rush of events.

Since that issue, 12 additional African countries have attained independence—Algeria, Botswana, Burundi, The Gambia, Kenya, Lesotho, Malawi, Rwanda, Tanganyika, Uganda, Zambia, Zanzibar—but Tanganyika and Zanzibar subsequently merged to form Tanzania, making a net gain of 11 independent countries.

Today Africa has 39 independent countries as compared with only four in 1950.

In alphabetic order, Africa now consists of the following independent countries and dependent territories, the latter with various degrees of colonial status:

ALGERIA. Capital: Algiers. Area: 917,537 square miles. Population: 11.0 million. France considered Algeria to be 15 departments of the French Republic. However, after a long war for independence by Algerians, the country was declared independent on July 3, 1962. About 90 percent of the people are of Arab or Berber descent. Most of the remainder are of European extraction, mainly French.

Exports of wine formerly brought in about half of all receipts from exports; however, in 1964 exports of wine amounted to only 23 percent of total exports. Citrus and other fruits, wheat, barley, pulses, potatoes, early vegetables, dates, olives, tobacco, and hides and skins are also exported.

ANGOLA. Capital: Luanda. Area: 481,351 square miles. Population: 5.2 million. Sometimes called Portuguese West Africa, Angola is Portugal's largest overseas province.

Coffee (mostly Robusta) is the leading export, making up about 45 percent of the value of all exports. Sisal, corn, cotton, sugar, cassava (manioc), palm oil, beans, palm kernels, and beeswax are other important agricultural exports.

BOTSWANA. Capital: Gaberones. Area: 275,000 square miles. Population: 600,000. A great deal of this former British protectorate ("High Commission Territory") is covered by the Kalahari Desert. The economy of the country is primarily dependent on cattle raising and the sale of animals and animal products. Before becoming independent on September 30, 1966, Botswana was known as Bechuanaland.

BURUNDI. Capital: Bujumbura (formerly Usumbura). Area: 10,747 square miles. Population: 2.8 million. Before World War I, this small, thickly populated country was part of German East Africa. Under Belgian administration, it was a part of the League of Nations Mandate (later United Nations Trusteeship) of Ruanda-Urundi. The Kingdom of Burundi became independent July 1, 1962, the same day as its northern neighbor, the Republic of Rwanda.

The chief agricultural export of Burundi is Arabica coffee, most of which goes to the United States.

CAMEROON. Capital: Yaoundé. Area: 183,569 square miles. Population: 4.7 million. Formerly a part of the old German colony of Kamerun, Cameroon—known as French Cameroun or French Cameroons—was a League of Nations mandate, then a United Nations trusteeship. On January 1, 1960, it became independent. In February 1961, Southern British Cameroons voted to join Cameroon. The additional area and population are included above.

Cocoa, coffee, bananas, cotton, rubber, palm kernels, and other farm products make up about 70 to 75 percent of Cameroon's exports. Industry is mainly lacking; however, a huge modern factory at Edea converts imported alumina into aluminum.

CANARY ISLANDS. Capitals: Las Palmas and Santa Cruz de Tenerife. Area: 2,808 square miles. Population: 990,000. This chain of seven mountainous islands of volcanic origin, lying off the northwest coast of Africa, is administered as an integral part of Spain. Las Palmas is an important port for refueling ships. The pleasant, mild climate of the islands has long attracted tourists. The Canary Islands have an essentially agricultural economy and export large quantities of bananas and tomatoes, as well as white potatoes, winter vegetables, and tobacco.

CAPE VERDE ISLANDS. Capital: Praia. Area: 1,552 square miles. Population: 218,000. Winds blowing westward off the Sahara give the Cape Verde Islands (in the Atlantic Ocean) a generally hot, dry climate. These 14 islands, an overseas province of Portugal, are not self-sufficient in food. Some bananas and coffee are exported. The islands are important fueling and servicing stations for ships and airplanes.

CENTRAL AFRICAN REPUBLIC. Capital: Bangui. Area: 238,200 square miles. Population: 1.3 million. The Central African Republic, formerly called Ubangi-Shari, was one of the four territories which made up French Equatorial Africa. It became independent August 13, 1960.

The country's chief export is cotton. Other farm exports include coffee, sisal, and peanuts. Diamonds are a nonagricultural export of importance.

CHAD. Capital: Fort-Lamy. Area: 495,800 square miles. Population: 3.4 million. Chad, also spelled Tchad, is a huge arid or semiarid country that was formerly a territory of French Equatorial Africa. Independence was attained August 11, 1960.

About 95 percent of Chad's exports are agricultural. Cotton is the main export, comprising about 75 percent of total exports. Other agricultural exports include live cattle, meat, hides and skins, and peanuts.

COMORO ISLANDS. Capital: Moroni. Area: 849 square miles. Population: 183,000. These islands in the Mozambique Channel off Africa's east coast produce and export a variety of exotic farm products—vanilla, essential oils (ilang-ilang, basil, jasmine, citronella), copra (dried coconut meat), sisal, and spices (pepper, cloves). The Comoro Islands are an overseas territory of France, and their inhabitants are French citizens.

CONGO. Capital: Brazzaville. Area: 132,000 square miles. Population: 1.0 million. Formerly known as Middle Congo, Moyen Congo, or French Congo, this new country was a territory of French Equatorial Africa. Its capital, Brazzaville, was the capital of that federation. Independence came August 15, 1960.

Congo's chief agricultural exports are palm kernels and palm oil. Wood and lead are also important.

CONGO, DEMOCRATIC REPUBLIC OF THE. Capital: Kinshasa (formerly called Leopoldville). Area: 905,565 square miles. Population: 15.9 million. Formerly the Belgian Congo, Belgium's only colony, Congo (Kinshasa) became independent June 30, 1960. A large country, with great economic potential, the Congo was first explored by Henry M. Stanley less than 100 years ago.

While the Congo exports large quantities of coffee, palm oil, palm kernel oil, and rubber, other exports (chiefly minerals) usually bring in more foreign exchange than do its agricultural products.

Among other large cities of the Congo are Lubumbashi (formerly Elisabethville), Kisangani (formerly Stanleyville), and Mbandaka (formerly Coquilhatville).

DAHOMEY. Capital: Porto-Novo. Area: 44,696 square miles. Population 2.3 million. Dahomey became fully in-

dependent August 1, 1960. It was formerly one of the eight territories which made up the federation of French West Africa.

Dahomey has one of the world's most purely agricultural economies, with about 97 percent of its exports farm products. Chief agricultural exports are palm oil, coffee, cotton, shea nuts, and coconuts.

Equatorial Guinea. Capital: Santa Isabel. Area: 10,830 square miles. Population: 260,000. The two larger parts of this Spanish overseas province (formerly called Spanish Guinea) are the island of Fernando Po and Rio Muni, on the African mainland. Fernando Po produces sizable amounts of cocoa. Rio Muni grows some coffee.

Ethiopia. Capital: Addis Ababa. Area: 457,267 square miles. Population: 20.2 million. This ancient country has always been independent. Eritrea, formerly an Italian colony, was federated with Ethiopia in 1952. About 90 percent of the country's population depends, directly or indirectly, on agriculture for a living. Subsistence farming largely prevails, and a large share of the crops are consumed on the farms.

Of the export crops, coffee stands first. It brings in 50 to 60 percent of Ethiopia's export income. Other farm exports include oilseeds, hides and skins, and pulses.

French Somaliland. Capital: Djibouti. Area: 8,500 square miles. Population: 70,000. This small, thinly populated overseas territory of France has exports worth about $2.5 million a year, chiefly salt and hides and skins. However, a part of Ethiopia's foreign trade passes through the port of Djibouti and makes a major contribution to French Somaliland's economic life.

Gabon. Capital: Libreville. Area: 103,100 square miles. Population: 500,000. Gabon became independent August 17, 1960. It had been a territory of French Equatorial Africa.

Gabon's farm exports are insignificant. Wood (mostly okoume) and minerals (largely manganese) bring in most of the country's foreign exchange.

Gambia, the. Capital: Bathurst. Area: 4,008 square miles. Population: 300,000. This tiny country, which lies on both sides of the Gambia River in West Africa, was a British colony and protectorate. It became independent February 18, 1965. Peanuts are the country's chief farm export and the mainstay of its economy.

Ghana. Capital: Accra. Area: 91,843 square miles. Population: 7.7 million. A republic within the British Commonwealth, Ghana is made up of the former British colony and protectorate of the Gold Coast and the United Nations Trusteeship of British Togoland. Indeendence came March 6, 1957.

Ghana is essentially a one-crop country but is the world's largest producer of that one crop, cocoa.

Electric power from the now-completed Volta River Dam at Akosombo is expected to attract considerable industry to Ghana.

Guinea. Capital: Conakry. Area: 94,925 square miles. Population: 3.5 million. As French Guinea, this country was a territory of French West Africa until it became independent October 2, 1958. It is *not* a member of the French Community.

About one-fourth of Guinea's exports are agricultural products—coffee, bananas, palm kernels, pineapples, and orange essence. Large deposits of bauxite, now being mined and exported, contribute the larger share of Guinea's exports.

Ifni. Capital: Sidi Ifni. Area: 580 square miles. Population: 52,000. This dry, rugged overseas province of Spain is an enclave within the territory of Morocco. Many of its Berber inhabitants are nomadic herdsmen. Small quantities of barley, olives, dates, cotton, and tobacco are grown. Exports are negligible.

Ivory Coast. Capital: Abidjan. Area: 124,503 square miles. Population: 3.8 million. The Ivory Coast, which became fully independent August 7, 1960, was formerly a territory within French West Africa.

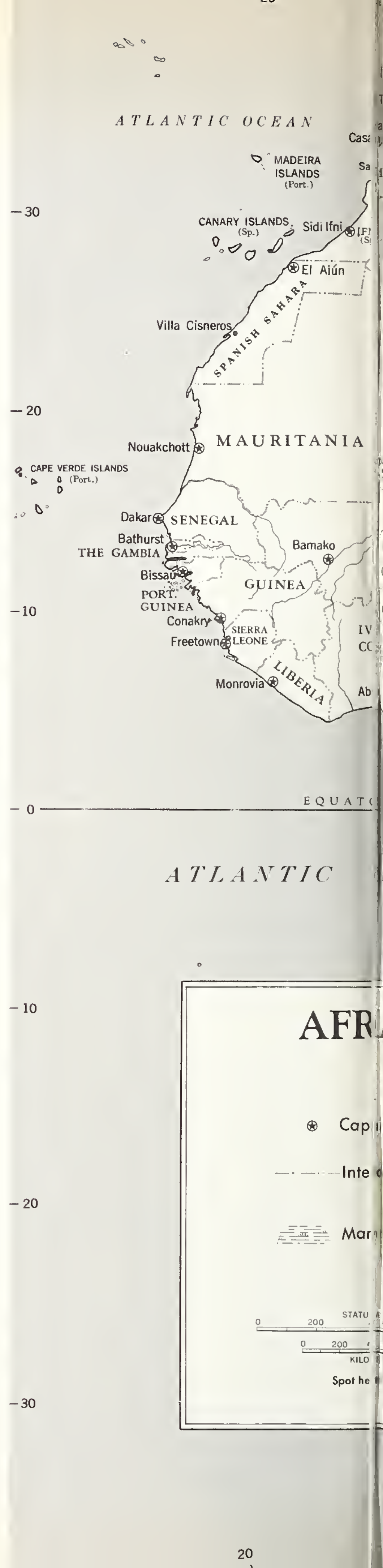
About 85 percent of the Ivory Coast's exports are agricultural. The country is the world's third largest coffee producer and the fourth largest grower of cocoa. Other agricultural exports include bananas, kola nuts, pineapples, palm kernels, and fruit juices.

Oil palm plantations now being planted will, within a few years, make the Ivory Coast a major exporter of palm oil and palm kernels.

Kenya. Capital: Nairobi. Area: 224,960 square miles. Population: 9.4 million. Kenya, formerly a British colony, has some political and economic ties with its East Africa Custom Union neighbors, Tanzania and Uganda. It became independent December 12, 1963. About a quarter-million of Kenya's people are non-African.

Coffee, the most valuable export, brings

Do you know that—*Africa is the world's second largest continent and the only continent that lies in both temperate zones as well as in the tropic zone • Africa has the longest river, the Nile, and also the largest desert, the Sahara, of any continent • Africa's Lake Victoria is the world's second largest fresh water lake, and its tallest mountain, Kilimanjaro, rises 19,564 feet above sea level • Africa numbers nearly 320 million people, and Nigeria with 56 million has the biggest population of any African country • Africa now has more independent nations than any other continent • Africa produces 80 percent of the world's cocoa and 75 percent of its palm oil and palm kernels • Africa ranks as the leading exporter of peanuts and the second largest exporter of oranges and tangerines • Africa mines over 90 percent of the world's diamonds. (Map by Foreign Regional Analysis Division, Economic Research Service.)*



MEDITERRANEAN SEA
Algiers
Bone
Tunis
Oran
Fes
Meknès
MOUNTAINS
TUNISIA
Tripoli
Al Marj
Benghazi
Alexandria
Port Said
Cairo
Suez Canal
Sinai Peninsula
Colomb-Béchar
ALGERIA
LIBYA
UNITED ARAB REPUBLIC
(EGYPT)
LIBYAN DESERT
NILE
RED SEA
PERSIAN GULF
Aswan
Wadi Halfa
ERG CHECH
AHAGGAR
9573
S A H A R A
TIBESTI
11,204
NUBIAN DESERT
Port Sudan
MALI
NIGER
NIGER
CHAD
SUDAN
Khartoum
GEZIRA
Atbara
Asmara
Blue Nile
White Nile
Lake Chad
Fort-Lamy
10,129 JEBEL MARRA
Al Ubayyid
UPPER VOLTA
Niamey
Ouagadougou
Nguru
Kano
Maiduguri
Kaduna
Jos
GHANA
TOGO
DAHOMEY
NIGERIA
Benue
Ibadan
Lagos
Benin City
Enugu
Accra
Lomé
Cotonou
Porto-Novo
VOLTA DAM
CAMEROON
Buea
Douala
Yaoundé
GULF OF GUINEA
Santa Isabel
FERNANDO PO
EQUATORIAL GUINEA
Bata
RIO MUNI
SÃO TOMÉ E PRINCIPE (Port.)
Libreville
ANNOBÓN
GABON
CENTRAL AFRICAN REPUBLIC
Bangui
Wâw
Baro
FRENCH SOMALILAND
Djibouti
GULF OF ADEN
SOCOTRA
ARABIAN SEA
Addis Ababa
ETHIOPIA
Bender Bella
Jūbā
UGANDA
SOMALI REPUBLIC
Mogadiscio
KENYA
Buta
CONGO
Ubangi
Mbandaka (Coquilhatville)
Kisangani (Stanleyville)
CONGO (Kinshasa)
Entebbe
Kampala
Tana
Chisimaio
Nairobi
Kigali
RWANDA
Lake Victoria
KILIMANJARO
19,564
Lualaba
Mwanza
Bujumbura
BURUNDI
CONGO
Brazzaville
Kinshasa (Léopoldville)
Kasai
Port Francqui
CABINDA (Angola)
INDIAN OCEAN
Mombasa
Tanga
PEMBA
ZANZIBAR
Zanzibar
Dar es Salaam
MAFIA ISLAND
TANZANIA
Lake Tanganyika
Rufiji
Sankuru
SEYCHELLES (U. K.)
Luanda
ANGOLA (PORTUGAL)
Lubumbashi (Elisabethville)
Mtwara
Masasi
MALAWI
COMORO ISLANDS (France)
Lobito
Benguela
Lake Nyasa
Lilongwe
ZAMBIA
Lusaka
Moçâmedes
Zambezi
Zomba
Nacala
Lumbo
MOZAMBIQUE CHANNEL
Kariba Lake
Livingstone
Victoria Falls
Salisbury
RHODESIA (U.K.)
MOZAMBIQUE (PORT.)
Beira
Tananarive
Tamatave
MALAGASY REPUBLIC
MADAGASCAR
MAURITIUS (U.K.)
REUNION (Fr.)
Grootfontein
NAMIB DESERT
SOUTH-WEST AFRICA (Mandate R. of S. Af.)
Windhoek
Walvis Bay
WALVIS BAY (R. of S. Af.)
BOTSWANA (BECHUANALAND)
KALAHARI DESERT
Bulawayo
Limpopo
Gaberones
Pretoria
Johannesburg
Mafeking
Lourenço Marques
Mbabane
SWAZILAND (U. K.)
Luderitz
Vaal
Orange
Bloemfontein
Maseru
Durban
LESOTHO (BASUTOLAND)
REPUBLIC OF SOUTH AFRICA
Port Elizabeth
Cape Town
CAPE OF GOOD HOPE
BOUNDARY REPRESENTATION IS NOT NECESSARILY AUTHORITATIVE
al boundary
wamp
500
800
800
0
10
20
30
40
50
60

dependent August 1, 1960. It was formerly one of the eight territories which made up the federation of French West Africa.

Dahomey has one of the world's most purely agricultural economies, with about 97 percent of its exports farm products. Chief agricultural exports are palm oil, coffee, cotton, shea nuts, and coconuts.

EQUATORIAL GUINEA. Capital: Santa Isabel. Area: 10,830 square miles. Population: 260,000. The two larger parts of this Spanish overseas province (formerly called Spanish Guinea) are the island of Fernando Po and Rio Muni, on the African mainland. Fernando Po produces sizable amounts of cocoa. Rio Muni grows some coffee.

ETHIOPIA. Capital: Addis Ababa. Area: 457,267 square miles. Population: 20.2 million. This ancient country has always been independent. Eritrea, formerly an Italian colony, was federated with Ethiopia in 1952. About 90 percent of the country's population depends, directly or indirectly, on agriculture for a living. Subsistence farming largely prevails, and a large share of the crops are consumed on the farms.

Of the export crops, coffee stands first. It brings in 50 to 60 percent of Ethiopia's export income. Other farm exports include oilseeds, hides and skins, and pulses.

FRENCH SOMALILAND. Capital: Djibouti. Area: 8,500 square miles. Population: 70,000. This small, thinly populated overseas territory of France has exports worth about $2.5 million a year, chiefly salt and hides and skins. However, a part of Ethiopia's foreign trade passes through the port of Djibouti and makes a major contribution to French Somaliland's economic life.

GABON. Capital: Libreville. Area: 103,100 square miles. Population: 500,000. Gabon became independent August 17, 1960. It had been a territory of French Equatorial Africa.

Gabon's farm exports are insignificant. Wood (mostly okoume) and minerals (largely manganese) bring in most of the country's foreign exchange.

GAMBIA, THE. Capital: Bathurst. Area: 4,008 square miles. Population: 300,000. This tiny country, which lies on both sides of the Gambia River in West Africa, was a British colony and protectorate. It became independent February 18, 1965. Peanuts are the country's chief farm export and the mainstay of its economy.

GHANA. Capital: Accra. Area: 91,843 square miles. Population: 7.7 million. A republic within the British Commonwealth, Ghana is made up of the former British colony and protectorate of the Gold Coast and the United Nations Trusteeship of British Togoland. Independence came March 6, 1957.

Ghana is essentially a one-crop country but is the world's largest producer of that one crop, cocoa.

Electric power from the now-completed Volta River Dam at Akosombo is expected to attract considerable industry to Ghana.

GUINEA. Capital: Conakry. Area: 94,925 square miles. Population: 3.5 million. As French Guinea, this country was a territory of French West Africa until it became independent October 2, 1958. It is *not* a member of the French Community.

About one-fourth of Guinea's exports are agricultural products—coffee, bananas, palm kernels, pineapples, and orange essence. Large deposits of bauxite, now being mined and exported, contribute the larger share of Guinea's exports.

IFNI. Capital: Sidi Ifni. Area: 580 square miles. Population: 52,000. This dry, rugged overseas province of Spain is an enclave within the territory of Morocco. Many of its Berber inhabitants are nomadic herdsmen. Small quantities of barley, olives, dates, cotton, and tobacco are grown. Exports are negligible.

IVORY COAST. Capital: Abidjan. Area: 124,503 square miles. Population: 3.8 million. The Ivory Coast, which became fully independent August 7, 1960, was formerly a territory within French West Africa.

About 85 percent of the Ivory Coast's exports are agricultural. The country is the world's third largest coffee producer and the fourth largest grower of cocoa. Other agricultural exports include bananas, kola nuts, pineapples, palm kernels, and fruit juices.

Oil palm plantations now being planted will, within a few years, make the Ivory Coast a major exporter of palm oil and palm kernels.

KENYA. Capital: Nairobi. Area: 224,960 square miles. Population: 9.4 million. Kenya, formerly a British colony, has some political and economic ties with its East Africa Custom Union neighbors, Tanzania and Uganda. It became independent December 12, 1963. About a quarter-million of Kenya's people are non-African.

Coffee, the most valuable export, brings

DO YOU KNOW THAT—*Africa is the world's second largest continent and the only continent that lies in both temperate zones as well as in the tropic zone • Africa has the longest river, the Nile, and also the largest desert, the Sahara, of any continent • Africa's Lake Victoria is the world's second largest fresh water lake, and its tallest mountain, Kilimanjaro, rises 19,564 feet above sea level • Africa numbers nearly 320 million people, and Nigeria with 56 million has the biggest population of any African country • Africa now has more independent nations than any other continent • Africa produces 80 percent of the world's cocoa and 75 percent of its palm oil and palm kernels • Africa ranks as the leading exporter of peanuts and the second largest exporter of oranges and tangerines • Africa mines over 90 percent of the world's diamonds. (Map by Foreign Regional Analysis Division, Economic Research Service.)*

in about a fourth of Kenya's export earnings. Other agricultural exports include sisal, tea, meat, corn, pyrethrum, and dairy products (chiefly butter).

LESOTHO. Capital: Maseru. Area: 11,716 square miles. Population: 700,000. Lesotho (formerly Basutoland) is a mountainous enclave geographically surrounded by the Republic of South Africa but politically separate from it. It was a British colony (actually a "British High Commission Territory"). It became independent October 4, 1966. For a predominantly agricultural country it is rather thickly populated.

Exports include mohair, wool, winter wheat, and hides and skins. However, most income comes from wages of Basutos who work in the Republic of South Africa.

LIBERIA. Capital: Monrovia. Area: 43,000 square miles. Population: 1.1 million. Founded over 100 years ago by freed slaves from the United States, Liberia continues to have close ties with the United States. The country uses the U. S. dollar as its national currency.

Rubber has long been Liberia's most valuable agricultural export and for a long time was the largest export commodity, agricultural or otherwise. Today iron ore exports are much more valuable than exports of rubber.

LIBYA. Capitals: Tripoli and Benghazi. Area: 679,360 square miles. Population: 1.6 million. Formerly an Italian colony, Libya was jointly administered by France and Britain from World War II until independence was attained December 24, 1951. Over 85 percent of the country is desert. The rural population generally engages in a simple, self-sustaining agricultural system based on a primitive pastoral economy.

Discovery of petroleum in Libya has greatly changed the country's economy within a very few years.

In 1959, agricultural exports—peanuts, livestock, hides and skins, castorseed, wool, olive oil, fruits and nuts, esparto, and other products—were valued at $7.4 million out of a total of $10.4 million. In 1964, agricultural exports worth $5.4 million made up less than 1 percent of total exports of $700.5 million.

MADEIRA ISLANDS. Capital: Funchal. Area: 302 square miles. Population: 283,000 (1960 census). Of volcanic origin, these islands 340 miles off the northwest coast of Africa are an integral province of Portugal and are populated by Portuguese. Farming is an important economic activity. Farms are small and worked by hand; irrigation is needed for part of the year. Wines, bananas, citrus fruits, sugar, early vegetables, butter, and cheese are the most important agricultural products. Tourism also brings in much foreign exchange.

MALAGASY REPUBLIC. Capital: Tananarive. Area: 227,800 square miles. Population: 6.3 million. This huge island to the east of mainland Africa is perhaps better known as Madagascar. A French colony, it became independent June 26, 1960.

Its exports—over 90 percent agricultural—include coffee, rice, vanilla, sugar, tobacco, cloves, raffia, peanuts, cassava starch and tapioca, butter beans, meat, hides and skins, and essential oils. The Malagasy Republic is especially noteworthy for vanilla; it is the world's largest producer of this flavoring and the largest supplier to the United States.

MALAWI. Capital: Zomba. Area: 45,-747 square miles. Population: 4.2 million. This country, formerly known as Nyasaland, was one of the three territories making up the old Federation of Rhodesia and Nyasaland. Malawi became independent July 6, 1964. Tobacco and tea vie for first place as the most valuable export crop. Peanuts and cotton are also important exports.

MALI. Capital: Bamako. Area: 464,-874 square miles. Population: 4.6 million. Mali has had a checkered recent history. Formerly known as French Soudan or French Sudan, it was a territory of French West Africa. With Senegal, it became independent June 20, 1960, as the Federation of Mali. After Senegal's withdrawal from that federation on August 20, 1960, Soudan took over the name of Mali.

Largely arid, or semiarid, Mali cannot support intensive agriculture, but produces millet and sorghum, shea nuts, rice, peanuts, and cotton, as well as large numbers of livestock. Peanuts are the chief export crop.

MAURITANIA. Capital: Nouakchott. Area: 419,230 square miles. Population: 800,000. Sparsely populated Mauritania was the last of the territories of French West Africa to become independent—on November 28, 1960.

Located as it is in the western Sahara, Mauritania has limited prospects for agriculture. However, there is enough grass to support considerable numbers of sheep, goats, cattle, camels, donkeys, and horses. Livestock and gum arabic are the country's chief agricultural exports.

Iron ore exports are now much more valuable than farm exports. In Africa, only Liberia exports more iron ore than Mauritania. Other economic assets include copper and ocean fish.

MAURITIUS. Capital: Port Louis. Area: 808 square miles. Population: 700,000. Sugar is the main item in the economy of this small, densely populated island in the Indian Ocean, making up 95 percent of all exports. Mauritius is now a British colony but talks leading toward independence are now underway.

MOROCCO. Capital: Rabat. Area: 171,305 square miles. Population: 13.4 million. Morocco, which became independent March 2, 1956, consists of the former protectorates of French Morocco and Spanish Morocco, as well as Tangier. Tangier was an international zone administered by seven nations, including the United States.

About 40 percent of Morocco's exports consists of agricultural products, principally citrus fruits, wine, fresh vegetables, beans and peas, corn, and cotton.

MOZAMBIQUE. Capital: Lourenço Marques. Area: 297,846 square miles. Population: 7.0 million. An overseas province of Portugal, Mozambique is often called Portuguese East Africa.

About 80 percent of its export income comes from a wide variety of farm products. Cotton exports make up about a fifth of total exports; others are cashew nuts, sugar, tea, copra, vegetable oils, sisal, and oil cake. Most of the cashew nuts now go to India, where they are shelled and re-exported. However, with perfection of shelling and grading machines, it it expected that more and more cashews will be shelled within Mozambique itself.

NIGER. Capital: Niamey. Area: 458,-995 square miles. Population: 3.3 million. This African country—not to be confused with its southern neighbor, Nigeria—was a territory of French West Africa. Independence came August 3, 1960.

Niger is a predominantly agricultural country but its productivity is severely limited by lack of rainfall. Peanuts, cotton, cattle, sheep and goats, and hides and skins are the chief agricultural exports.

NIGERIA. Capital: Lagos. Area: 356,-669 square miles. Population: 55.7 million (1963 census). One of the very large African countries, Nigeria received its independence October 1, 1960. It had formerly been a British colony and protectorate. In February 1961, the Northern British Cameroons voted to join Nigeria. Nigeria has the largest population of any country in Africa, and its annual exports amount to over $700 million, of which about 75 percent are agricultural.

The chief farm exports are cocoa, palm oil, palm kernels, peanuts, cotton, and rubber. Nigeria is the world's largest exporter of palm kernels, palm oil, and peanuts, and is the second largest exporter of cocoa beans. The country is very nearly self-sufficient for its domestic food needs and has a large and vigorous internal trade in farm products.

Nigeria has recently become a major producer of petroleum, reducing the country's dependence on agriculture for its national wealth.

PORTUGUESE GUINEA. Capital: Bissau. Area: 13,948 square miles. Population: 555,000. This overseas province of Portugal has a mostly agricultural economy. Peanuts, palm kernels, rice, palm oil, and other agricultural exports comprise about 97 percent of all exports.

RÉUNION. Capital: Saint-Denis. Area: 969 square miles. Population 360,000. Réunion, an overseas department of France located in the Indian Ocean, is a sugar island but also produces vanilla and essential oils.

RHODESIA. Capital: Salisbury. Area: 150,333 square miles. Population: 4.3 million. Rhodesia, also known as Southern Rhodesia, was one of the three parts of the Federation of Rhodesia and Nyasaland, which was officially dissolved on December 31, 1963, after 10 years of existence. On November 11, 1965, Rhodesia made a unilateral declaration of independence; this independence has so far not been recognized by any other country.

Rhodesia is the world's second largest flue-cured tobacco exporter and the major competitor of the United States in world flue-cured tobacco markets.

RWANDA. Capital: Kigali. Area: 10,-169 square miles. Population: 3.0 million.

Located far inland in the mountains of Central Africa, Rwanda is the northern half of what used to be Ruanda-Urundi, which became independent July 1, 1962. Its average population density of 295 persons per square mile is very high for an African country. Chief export: Arabica coffee.

São Tomé and Principe. Capital: São Tomé. Area: 372 square miles. Population: 65,000. Important 400 years ago as major exporters of sugar, these two Portuguese islands in the Gulf of Guinea are now of some importance as exporters of cocoa and coffee.

Senegal. Capital: Dakar. Area: 76,124 square miles. Population: 3.5 million. Senegal was formerly a territory of the federation of French West Africa and its capital, Dakar, was the federal capital. Independence came June 20, 1960.

Peanuts and peanut products make up 75 to 85 percent of all exports from Senegal. In fact, Senegal and Nigeria are the world's two largest exporters of peanuts and peanut products (peanut oil and peanut oil cake).

Seychelles. Capital: Victoria. Area: 156 square miles. Population: 45,000. These islands in the Indian Ocean, located about 1,000 miles off the east coast of Africa, export copra, cinnamon, vanilla, and vegetable oils. Seychelles is a British colony.

Sierra Leone. Capital: Freetown. Area: 27,925 square miles. Population: 2.3 million. Sierra Leone, long a loyal British colony and protectorate, became independent April 27, 1961.

Unlike many African countries, Sierra Leone's economy is not chiefly agricultural. In 1964, only 17 percent of its exports were of agricultural products—mainly palm kernels, coffee, cocoa, piassava (palm fiber), kola nuts, and ginger. Most of the nonagricultural export income comes from diamonds, iron ore, and chrome.

Somali Republic. Capital: Mogadiscio. Area: 246,202 square miles. Population: 2.0 million. Situated at the Horn of Africa, the Somali Republic became fully independent July 1, 1960, merging the former British Somaliland, a protectorate, and the former Somalia or Italian Somaliland. Somalia. once an Italian colony, had been administered by Italy after World War II as a United Nations trusteeship.

Bananas are the Somali Republic's chief export, accounting for 45 percent of all exports, which were valued at $33.2 million in 1965.

South Africa, Republic of. Capitals: Pretoria and Cape Town. Area: 472,926 square miles. Population: 17.9 million. Independent since 1910, the Republic was formerly a member of the British Commonwealth but withdrew from it May 31, 1961. Its 3.5 million persons of European descent comprise by far the largest white population of any African country.

The economy is primarily one of mining, manufacturing, and commerce. However. in 1964, agricultural exports made up 44 percent of all exports (excluding gold). Chief farm exports are wool, corn, fruit, hides and skins, sugar, wattle bark and extract, mohair, karakul pelts, processed meats, peanuts, and peanut oil.

South-West Africa. Capital: Windhoek. Area: 317,887 square miles. Population: 565,000. South-West Africa, previously a German colony, is administered by the Republic of South Africa under a mandate from the old League of Nations. In practice, it is governed as a fifth province of the Republic of South Africa. A part of this territory consists of the Namib Desert on the Atlantic Ocean.

The territory's agriculture is of the dry-land pastoral type, with emphasis on karakul sheep. Karakul pelts, produced by killing and skinning newborn karakul lambs, are South-West Africa's chief agricultural product. The pelts are handled as fur, not wool, and are used in making women's fine Persian lamb coats.

Cattle are also raised and shipped live to the Republic of South Africa. However, exports of diamonds, minerals, and fish products are much more valuable than farm exports.

Spanish Sahara. Capital: El Aiún. Area: 102,703 square miles. Population: 27,000. This African province of Spain consists mostly of desert sands. Some of its people make a living by fishing in the Atlantic Ocean. Farming is meager, comprising little more than the growing of small patches of barley, wheat, and millet in protected valleys. Camels, goats, and sheep are the chief livestock. It exports little or nothing.

Sudan. Capital: Khartoum. Area: 967,500 square miles. Population: 13.5 million. The former Anglo-Egyptian Sudan had a national government that was something of a rarity—a condominium governed by both the United Kingdom and Egypt. The country became independent January 1, 1956.

About 98 percent of Sudan's foreign earnings come from agricultural commodities—chiefly cotton lint, cottonseed, gum arabic, peanuts, sesame, and livestock. Cotton lint and cottonseed usually account for about half of all exports. Most of Sudan's cotton is grown with irrigation water from the Nile River. Other crops are largely rain-grown.

Swaziland. Capital: Mbabane. Area: 6,705 square miles. Population: 300,000. A small British protectorate, Swaziland is largely surrounded by the Republic of South Africa. It also adjoins Mozambique, with which it is connected by the new Swaziland Railway.

Sugarcane is Swaziland's most valuable farm product, having shown spectacular increases over the past few years. Other important farm exports include cotton, meat, canned pineapples, citrus fruits, and rice. Nonagricultural exports include pulpwood, iron ore, and asbestos.

Tanzania. Capital: Dar es Salaam. Area: 362,820 square miles. Population: 10.5 million. Tanzania consists of a merger of Tanganyika, which became independent December 9, 1961, and Zanzibar, which attained independence December 10, 1963. The merger was effected in April 1964. Tanzania's chief agricultural exports are sisal, coffee, cotton, and cloves. The cloves come from the island of Zanzibar.

Togo. Capital: Lomé. Area: 21,850 square miles. Population: 1.7 million. Formerly a part of German Togoland, Togo was called French Togoland during administration as a mandate of the League of Nations and a trusteeship of the United Nations. It became fully independent April 27, 1960. (British Togoland, the rest of the old German Togoland, is now an integral part of Ghana.)

Togo's exports, about 75 percent agricultural, consist mostly of coffee, cocoa, palm kernels, copra, cotton, and cassava flour and starch.

Tunisia. Capital: Tunis. Area: 48,332 square miles. Population: 4.7 million. Formerly a French protectorate, Tunisia became independent March 20, 1956.

Agricultural products, chiefly olive oil, grains, and wine, as well as citrus fruits, dates, and esparto grass, normally provide about two-thirds of the value of Tunisian exports.

Uganda. Capital: Kampala. Area: 92,525 square miles. Population: 7.6 million. A landlocked country on the north shore of Lake Victoria, Uganda has a varied and interesting topography and climate. It became independent October 9, 1962.

Coffee and cotton are the "big two" of agricultural exports. Other exports of farm products include tea, sugar, cottonseed cake, and hides and skins.

United Arab Republic (Egypt). Capital: Cairo. Area: 386,000 square miles. Population: 29.8 million. The seat of an ancient civilization, Egypt has a 6,000-year history and is one of the world's oldest traders in agricultural products. Independent since 1922, Egypt has the second largest population among the African countries.

Egypt's agriculture is almost exclusively dependent on irrigation water from the Nile River. Almost 97 percent of the country is wasteland. Farm crops make up about 70 percent of Egypt's exports. Cotton is the leader. It has accounted for 54 percent of all exports in the last 5 years; nearly 56 percent in 1965.

Upper Volta. Capital: Ouagadougou. Area: 105,869 square miles. Population: 4.8 million. Formerly a territory of French West Africa, Upper Volta achieved independence August 5, 1960.

Landlocked and semiarid, Upper Volta has an agricultural pattern based almost entirely on livestock herding and subsistence crop production. Chief agricultural exports are live cattle, sheep and goats, peanuts, fresh vegetables, sesame, and cotton.

Zambia. Capital: Lusaka. Area: 288,130 square miles. Population: 3.7 million. Nonagricultural products—chiefly copper—are the leading earners of foreign exchange for Zambia (formerly Northern Rhodesia). Zambia is the world's third largest producer of copper. Flue-cured tobacco and confectionery peanuts are the main agricultural exports. Zambia became independent October 24, 1964, and is a member of the (British) Commonwealth of Nations.

An agricultural safari through East Africa's Great Rift Valley

By CAREY B. SINGLETON, JR.
Foreign Regional Analysis Division
Economic Research Service

To obtain first-hand knowledge of agricultural problems and potential in the three East African countries, Mr. Singleton recently made a trip into their less traveled hinterlands such as the semiarid Kenya area shown in the photograph at right. This article gives his impressions.

East Africa—Kenya, Uganda, and Tanzania—has some of the wildest and most primitive country found anywhere in the world, with geography, scenery, and wildlife quite different from the rest of Africa. It also has some of the best grasslands and the most fertile farm areas anywhere on the continent.

Through all three countries sweeps the Great Rift Valley, a striking geographic phenomenon, that extends all the way from the mouth of the Zambezi River (in Mozambique) up through the Red Sea into the Middle East, forking just north of Lake Nyasa in Tanzania to form the Eastern and Western Rifts.

East Africa is geographically the "roof of Africa," for between the Rifts lies the Central Plateau, with altitudes ranging from 3,000 to 6,000 feet. The range grasslands of the Rifts and the rich fields of the Central Highlands are interspersed with vast areas of arid savannas, open wooded grassland (*miombo*) and great volcanic peaks—most famous among them Mount Kilimanjaro, at 19,564 feet the highest mountain in Africa.

Pyrethrum—important export; corn, important food crop

From Nairobi, commercial center of East Africa, I went with Howard Akers, U.S. Agricultural Attaché for East Africa, on a 4-day trip into the Rift Valley and Central Highlands of Kenya.

On our way north, we drove through the Rift grasslands and through the Highlands—the major field and tree crop production area of Kenya.

At Nakuru, the commercial and administrative center of this part of the Rift Valley, we visited the Kenya Pyrethrum Board Processing Plant. This plant is at present shipping highly concentrated pyrethrum extract to the United States by air in 20-gallon containers valued at $1,800 each. In 1965, the United States purchased $5.5 million worth of extract from Kenya.

Kenya is the world's leading producer of pyrethrum; it has over 40,000 African farmers and 100 cooperatives producing the chrysanthemum-type flowers from which this insecticide extract is made. The flowers are not a plantation crop but are grown in mixed farming on a rotation basis.

Next day we drove to Kitale, located on the slopes of towering Mount Elgon in the northwestern part of Kenya near the Uganda border. This is the country's major commercial corn-producing area.

Here we visited the Ministry of Agriculture's Maize Improvement Center, where advanced research in varietal hybrid corn seeds is being conducted. Varietal hybrids developed by the Center, in cooperation with USAID and the Rockefeller Foundation, are helping subsistence farmers in the area west of the Rift Valley to increase their yields and production of corn substantially. The Center instructs the farmers how, when, and why to grow the hybrids, and maintains large numbers of demonstration plots, so that there is at least one within walking distance of every corn grower in the area. Sufficient varietal seed is expected to be available for 1967 planting.

From Kitale we drove to Nyeri in the highlands, to visit the Uaso Nyiro Settlement Scheme. Here, Peace Corps volunteers from the United States are acting as assistant settlement officers and are providing administrative and agricultural know-how to help insure the success of the settlement project.

These volunteers, who know the farmers, speak their language (Swahili), and understand their problems, are involved both indoors and outdoors in the various operations connected with land settlement. They keep farm records and assist in budget problems; they also construct levees and bridges, cattle dips, and water supply systems.

Land ownership—important problem

Land settlement, land consolidation, and land tenure are among the major agricultural and political problems facing Kenya today. Since the coming of *uhuru* (independence), over one million acres of farmland in the Central Highlands have been purchased by the Kenya Government from 830 European farmers and turned over to African farmers at a price of $20 to $30 per acre. Often a number of African farmers will band together to buy a European farm with government assistance. The government's plans call for 400,000 additional acres to change hands in the next 4 years at a rate of 100,000 acres yearly.

The last stop before our return to Nairobi was Thika,

Important export crops include pyrethrum (left, flowers being dried), of which Kenya is world's largest producer, and cotton (above, supplies being unloaded for Nyanza Textile Mill), of which Uganda is Africa's third largest exporter.

where we visited a coffee farm. Many coffee plantations in the Central Highlands are owned and operated by Greeks, Italians, and other Europeans. The average plantation in the Thika area is 150 acres, though some go up to 300.

A major problem for Kenya is maintaining the high quality of its coffee. The coffee berry disease is seriously affecting the crop. If this disease could be conquered, Kenya's coffee production could increase; but so would the problem of selling the larger supply on world markets. Kenya has applied for membership in the International Coffee Agreement.

Livestock, potential; coffee, achievement

The second installment of my safari took me south from Nairobi with the agricultural attaché to Dar es Salaam, Tanzania. We began this part of the journey by driving through the Masai country of Kenya and Tanzania—open miombo and sweeping arid savannas—excellent wild game and grassland country with high potential for modern livestock ranching.

Wild animals and cattle have always been the livelihood of this strange, primitive, and undeveloped area. Masai nomadic herdsmen roam the semidesert savannas, seeking new grazing grounds for their cattle and hunting for wild game. Masai men and women—striking and unusual in appearance with their elongated ear lobes, long decorative earrings, and numerous strings of beads and bangles—include in their dress the skins of various wild animals. Their staple diet includes milk, butter, and fresh blood drawn from their animals.

The Arusha-Moshi area around Mount Kilimanjaro, our first stop, is the most important coffee-producing area of Tanzania. Most of the African-grown coffee is interplanted with plantains (cooking bananas).

In the early 1900's, missionaries introduced Arabica coffee for production by the Chagga tribe on the slopes of Kilimanjaro and Meru Mounts; it now supplies about four-fifths of the country's total coffee output. Probably

Also an important cash crop in the area is tea. Ugandans above, waist-deep in their work, are gathering tea leaves, which will probably be processed in a plantation factory.

instrumental in its success is the long-established coffee research station and cooperative marketing and processing organization, the Kilimanjaro Native Coffee Union, located at Lyamungu.

One of world's biggest sisal regions

Tanzania is the largest sisal producer in the world, with 35 percent of the world's annual output. As we traveled east from the Arusha-Moshi area through the Tanga region, it became apparent that this is one of the world's largest single areas of sisal production. The average size of a plantation here is well over 50,000 acres.

The Tanzanian sisal industry is, however, likely to undergo a prolonged slump in output. Not only is sisal receiving severe competition from synthetic fibers, but local handlers report that the export price has dropped from $252 per metric ton in 1965 to $220 at the present time. Meanwhile, costs of production are rising. Workers on sisal plantations in Tanzania formerly received food,

Field of sisal in Tanzania, above at left; sisal fiber drying, above at right.

shelter, and $4.60 per month as wages; now, however, the Tanzanian Government has established a minimum of $17.50 per month with food and shelter.

Problems of Tanzanian agriculture

There is urgent need for soil conservation, cash crop diversification, and introduction of new cash crops. Tanzania has relied on traditional cash crops such as sisal, cotton, and coffee, and with declines in world prices of these commodities, it may have a difficult time holding its own. However, as we traveled through the hinterland, there appeared to be significant potential to diversify and expand agricultural production. Pineapple growing has good possibilities in several areas. Along the coast there are good possibilities also for timber and wood pulp industries, soybeans, and palm kernel and palm oil production.

There is urgent need too for outside venture capital throughout the country. Opportunities exist for agricultural processing and food industries if private capital, technical assistance, and management know-how are meshed together. However, the breakoff of diplomatic relations with Great Britain over the Rhodesian crisis has stymied the proposal of British financial aid for Tanzania's Five-Year Development Plan and specific agricultural projects.

Tanzania also needs a farm-to-market road program, to help transport farm products to villages and cities; an agricultural extension service, to provide agricultural officers and technicians for on-the-job training of subsistence farmers; and livestock development programs patterned after Kenya's, to concentrate on improved breeds, disease control, and improved quality.

Cash crops in Uganda

On the third part of the safari, we flew from Dar es Salaam to Entebbe, Uganda, and drove to Kampala, the capital city. Then came 4 days via Land Rover. First stops were the Uganda Sugar Plantation and Factory at Lugazi and the Nyanza Textile Mill—one of Africa's largest—at Jinja.

The Uganda Sugar Plantation has 25,000 acres of sugarcane, each yielding about 45 to 50 tons annually; 30 percent of the cane is grown under swamp conditions, 40 percent on rolling country, and 30 percent on flatlands. A sprinkler system is in operation on about 1,100 acres.

The plantation also has 2,500 acres of tea—an increasingly important cash crop in Uganda; and it operates two tea processing factories. It has 60 acres of tea under irrigation—an experiment to see the effect on tea leaf production. And, not to neglect other beverage crops important on world markets, it has 1,300 acres of Robusta coffee, about 70 of Arabica coffee, and 70 experimental acres of cocoa.

Traveling northwest to Masindi, I visited the USAID community farm project and the Murchison Falls area on the Albert Nile, where there appeared to be significant potential for irrigation development and hydroelectric power. Toward the southwest, heading for the Fort Portal area on the Congo border, I crossed undulating arid savanna country interspersed with plantains, bananas, and coffee, small cotton farms (shambas), and tea plantations.

This high plateau country, with altitudes ranging from 3,000 to 5,000 feet, has a very pleasant climate despite its location astride the equator. Everybody was vigorously on the move—walking to and from villages carrying loads on their heads, or hoeing fields, or driving cattle. Men do such work as felling trees, clearing the land, building thatched huts, making pombe (beer), hunting, and fishing. Women and children prepare the fields for crops, plant seed, cultivate, weed, and harvest.

My final visits before flying back to Nairobi were to a large tea plantation and factory in the Fort Portal area and a cotton buying station and ginnery at Kasese.

Uganda's agricultural problems and potential

Uganda's agricultural problems are much like those of Tanzania. It needs crop diversification and experimentation work, stressing new crops such as cocoa, vanilla, and soybeans; farm-to-market road program in interior area; livestock and dairy development; and agricultural extension.

East Africa in general is an underdeveloped area with comparatively limited resources for economic growth. There is, however, considerable potential for improved productivity, particularly in agriculture and agricultural processing. And among the goals and aspirations of these three young nations in a hurry to transform and develop are increased agricultural production and higher food and fiber consumption levels for their people.

Development of Africa's Cashew Industry Hinges on Mechanization

Mozambique and Tanzania—two of the world's three largest producers of cashew nuts—are in the early stages of developing a highly mechanized shelling industry to compete with India for the attractive and growing world kernel market. Since the bulk of past sales has been in dollar and sterling areas, the market is additionally appealing.

Both countries for years maintained several small-scale hand-shelling operations but could not find enough cheap labor to increase their shelling industries to any great extent. As a result, nearly all of east Africa's rapidly expanding cashew production has been shipped to India for processing, an unsatisfactory arrangement because of the low foreign exchange earnings obtained from raw nuts as compared with kernels.

Mozambique's first large-scale mechanized shelling plant began operating in the António Enes district on an experimental basis in 1963 and has a capacity of about 9,000 tons of raw nuts annually. Late last year a former hand-shelling plant in Lourenço Marques was mechanized and now has a capacity of 15,000 tons. A third plant at Machava, near Lourenço Marques, uses the most highly mechanized process. With a capacity of 30,000 nuts, it employs only 120 people—an output of 250 tons per worker. If economically viable, this plant's process should become the leading one in the area. Still another factory was opened in João Belo in September. It claims a capacity of 12,000 tons and includes such advanced techniques as automated size sorting before shelling and "electric eye" grading of processed kernels. Plans call for tripling the capacities of the latter two firms within the next 5 years.

Tanzania's capacity much lower

Tanzania's only fully mechanized shelling plant is in Dar es Salaam. This plant, with a capacity of 9,000 tons of raw nuts and a labor force of 700, has run into some technical difficulties. However, plans call for two more factories of this type in the next few years.

Africa currently produces over two-thirds of the world's raw cashew nuts, with India supplying most of the remaining third. By comparison, as late as 1950-54 India's production equaled the entire African crop.

Mozambique has been the world's largest producer of raw cashews in 9 of the past 10 years, averaging 110,000 short tons in 1957-66. In 1963 and 1964 the country actually produced half the entire world crop. Its 1961-65 average of 131,600 tons was 68 percent above the 1956-60 average of 78,200, a growth that resulted partly from intensive planting over the past two decades. Much of this planting is geared toward efficient plantation-type cultivation, particularly in the Moçambique District in the north, and many of the plants have yet to come into production. In contrast, much of the present crop is harvested by natives on tribal lands where the trees grow in a semi-wild state. Intensified gathering efforts in response to rising prices and growing demand in India and elsewhere are another major reason for the growth in production.

Equals India's crop this year

Tanzania has ranked third behind Mozambique and India in cashew production for many years, averaging 53,000 tons in 1957-66. However, this year, the country's exceptionally good crop equaled India's below-average 80,000 tons. Average 1956-60 production at 34,400 tons more than doubled to an average of 75,800 tons in 1961-64. As in Mozambique, much of this growth has resulted from increasing demand and an intensive government-directed campaign to plant more trees in both small tribal orchards and large plantations. This campaign has been supplemented by a government-sponsored marketing cooperative, which has been able to bargain more effectively with Indian traders and secure better prices for pickers.

East Africa's rapidly expanding production of raw nuts and its growing mechanized shelling industry forecast intense competition for India's ancient hand-operated shelling industry. Mechanized shelling also promises a new viable earner of foreign exchange in hard currency areas. At current prices this could amount to up to $90 million a year from cashew kernels and $2 million to $3 million from cashew shell liquid (CNSL) and other by-products if entire capacity were utilized. And by 1970, east Africa could supplant India as the world's leading source of both cashew kernels and shell liquid.

—Robert C. Torrens
Fruit and Vegetable Division, FAS

Botswana and Lesotho Join the Ranks of Africa's Free Nations

The two latest African territories to join the upswing toward independence—Botswana and Lesotho—are both landlocked countries with economies dependent almost entirely on agriculture and on the employment of much of their labor forces in neighboring South Africa.

Botswana, formerly Bechuanaland, became a republic on September 30, and Lesotho, formerly Basutoland, a constitutional monarchy on October 4. Both had been British protectorates and High Commission territories.

About the size of Texas, Botswana faces South-West Africa to the west, Rhodesia to the east, Zambia to the north, and South Africa to the south. The Kalahari Desert, home of the African bushmen, spans the western part of the country, causing about some 80 percent of its 600,000 people to settle in a long, narrow strip along the railway connecting South Africa with Rhodesia. Some 30,000 work in South Africa on a transient basis.

Except for some small, irrigated farms in the eastern part of the country and some ranch and irrigated lands in the north along the Rhodesian frontier, all Botswana's land is controlled by Africans.

Cattle raising is the country's biggest business, with sheep and goats also important. The Malopo Ranch at the southern edge of Kalahari Botswana, managed by the Commonwealth Development Corporation (CDC), spans 300,000 acres and is a showplace of livestock management and range control in arid areas. However, drought over the past few years has generally caused serious setbacks

as deaths and heavy sales reduced the 1962 cattle population of 1,352,000 head almost 20 percent by 1966. Although rains this year have brought some relief, it will take several years for livestock numbers and pastures to recover fully.

Botswana has both a modern slaughter and cold-storage plant at Lobatsi, owned and operated jointly by CDC and Bechuanaland Abattoirs Ltd., and a privately owned meat canning plant.

Exports mostly livestock products

Livestock products make up about 85 percent of Botswana's exports. From $3.6 million in 1952, income from these exports rose to about $17 million last year. Fresh and canned meats and meat products, the biggest items, go mainly to the United Kingdom and South Africa, while live animals are shipped principally to Zambia and Rhodesia.

Botswana also produces grain sorghum, corn, peanuts, and beans. In normal times and at present consumption levels, the country is largely self-sufficient in foods, importing only wheat and processed items. But normal times have not prevailed over the past few years as the drought became increasingly severe. Grains, dried milk, vegetable oils, and other foods were sent in by Great Britain and the United States, through the United Nations World Food Program, and by OXFAM, a British organization similar to CARE.

Lesotho, half the size of West Virginia, lies in the most mountainous part of southern Africa, surrounded by South Africa. Three-fourths of the country is between 6,000 and 11,000 feet above sea level, accessible only by packhorse and bridle trail. In its mountains, two of Africa's largest rivers begin flowing to the sea: The Orange westward to the Atlantic and the Tugela eastward to the Indian Ocean. The country's population is rapidly nearing the million mark. Of these, about 180,000 are employed by industries, mines, and farms in South Africa.

Chief agricultural exports are wool and mohair, produced in the peripheral lowlands and sold at public auction in South Africa. Largely because of poor grading and handling by producers, the return on these exports is not so great as it could be.

Lesotho's major crop is corn. In 1960, the last year for which figures are available, production was estimated at 1.3 million bags (200 lb.) and consumption at 1.6 bags per capita. Corn imports from South Africa, normally about 200,000 to 300,000 bags annually, are rising to higher levels this year because of a poor domestic crop. The country also produces about 450,000 to 500,000 bags of summer wheat and 150,000 of winter wheat annually, as well as smaller quantities of grain sorghum, peas, and beans. Part of the winter wheat crop is exported to the Republic of South Africa.

Rivers offer great potential

The rivers rising in Lesotho's mountains offer great potential for economic development. Should the much discussed Ox Bow hydroelectric and power scheme get underway, these mountains could well become an important source of electricity for all of southern Africa and even develop into a major tourist area. Meanwhile, the United Kingdom is currently assisting Lesotho with grants averaging $7 per capita, and other public and private sources are also providing aid.

About 75 percent of Lesotho's population is literate—one of the highest percentages in all of Africa. The country boasts a number of teacher-training colleges, a technical-training institute, and a university—the University of Basutoland—which attracts students from Botswana, Swaziland, and other African countries.

—Robert C. Moncure
Foreign Regional Analysis Division
Economic Research Service

Coffee Now Stands in First Place Among African Farm Exports

The spectacular rise in coffee production and exports make this crop one of Africa's outstanding success stories: Today coffee is Africa's most valuable agricultural export.

In the past 5 years African coffee production has averaged about 16.7 million bags (1 million metric tons) per year—more than six times as much as in the years just before World War II and nearly four times as much as in the early postwar years.

Furthermore, Africa's share of world coffee output has increased from about 6 percent in the prewar years to almost 25 percent in recent years. In fact, during the 1964-65 coffee season, Africa grew nearly 31 percent of the world's coffee; this high percentage resulted from a small coffee crop in Brazil.

Africa grows two main varieties of coffee: Robusta, which thrives at low altitudes and is well suited for the manufacture of instant coffee; and Arabica, which does well in the higher altitude countries of tropical Africa.

While far outdistanced in coffee production by the South American countries of Brazil and Colombia, a number of African countries rank rather high in coffee production. The Ivory Coast is usually the world's third largest coffee producer but Angola sometimes achieves this position. Uganda is currently the world's sixth largest.

Other African countries which export large quantities of coffee include Ethiopia, Congo (Kinshasa), Malagasy Republic, Cameroon, Kenya, and Tanzania. Though production is smaller, coffee is the most valuable agricultural export of Burundi, Central African Republic, Togo, and Rwanda. Coffee is also produced in a number of other countries of Africa.

In 1965, the United States paid out over a billion dollars for coffee imports from all parts of the world. Of this amount, almost one-fourth was paid for coffee from Africa. In that year, U.S. imports of African coffee were valued at $246 million.

The United States imported coffee worth $60 million from Ethiopia, $46 million from Angola, $39 million from Uganda, $31 million from Ivory Coast, $17 million from Burundi and Rwanda, and $14 million from Malagasy Republic. Significant amounts also came from several other African countries.

—Snider W. Skinner
Foreign Regional Analysis Division
Economic Research Service

USSR To Harvest Record Grain Crop in 1966

This year the Soviet Union is bringing in the country's largest grain crop on record. Latest USDA estimates put the total crop of grain and pulses at about 130-135 million metric tons, 70-75 million of it wheat. The wheat estimate is 7 to 12 million metric tons greater than the U.S. estimate of the record harvest of 1958 and about 25 million more than the poor crop of 1965.

According to Soviet sources, government procurements of all grains in the major producing Republics—the Russian Republic, Kazakhstan, and the Ukraine—are at all-time highs, totaling more than 74 million metric tons. Wheat procurements alone, at above 54 million, are 12 million above any previous level (*Pravda*, Oct. 2). Later purchases from these Republics, as well as from minor producing areas, will increase the total quantities somewhat. Large procurements of other food grains—millet, buckwheat, and rice—are also expected.

The Soviet Government's supplies of wheat from the 1966 harvest will exceed—by a wide margin—those of any other single year. These supplies should also be of generally good quality because of good harvesting conditions.

In addition to favorable weather, the record crops reflect the effect of much higher rates of fertilization and higher incentives than in previous years. The exceptionally large wheat crop was further assisted by the priority given to wheat since the 1963 crop failure. Higher government grain purchase prices and a 50-percent bonus for above-plan deliveries of wheat do much to explain the record wheat procurements.

USSR GOVERNMENT GRAIN PROCUREMENTS BY TYPE[1]

Type of grain	1962	1963	1964	1965[2]	1966[3]
	Mil. metric tons	*Mil. metric tons*	*Mil. metric tons*	*Mil. metric tons*	*Mil. metric tons*
Wheat	34.6	22.7	38.7	25.0	54-56
Other[4]	22.0	22.1	29.6	12.0	16-19
Total grain	56.6	44.8	68.3	37.0	70-75

[1]All figures in accounting weight, i.e., at a standard moisture and foreign matter level. USDA assumes that these figure are not inflated. [2]Procurements for the USSR were not reported in 1965. These figures were accumulated from Republic and regional totals reported in the Soviet press and remain estimates. [3]Lower figure is reported to date. Upper figure is the level procurements could reach when all regions have completed procurements. [4]Includes rye, barley, oats, corn, buckwheat, millet, rice, beans, and peas.

Canada Expands Share in U.K. Dry Bean Market

Canadian acreage sown to dry beans increased by 20 percent to 90,700 acres between 1964 and 1966. The principal incentive has been the strong U.K. demand for white pea beans, the primary ingredient in canned baked beans. This item is favored by the British public to the extent that annual per capita consumption is now 7 pounds. However, the United States continues to be the major supplier of the U.K. market, accounting for nearly 53 percent of the 1965 imports, contrasted with 33 percent from Canada. Some dry beans are also supplied the United Kingdom by the Malagasy Republic (mostly limas) and Chile.

U.K. imports of white dry beans from the United States and Canada for 1963 to 1965 are as follows:

	1963	1964	1965
	1,000 lb. sacks	*1,000 lb. sacks*	*1,000 lb. sacks*
United States	1,390,000	692,000	830,000
Canada	275,000	285,000	543,000

Commonwealth preference grants duty-free entry to the United Kingdom for Canadian white dry beans opposed to an 8 percent duty which applies to imports from the United States.

Canadian Public Elevators Taking U.S. Grain

The Canadian Board of Grain Commissioners has eased restrictions against November storage of U.S. grain in government elevators at Montreal and Quebec.

This action concerns U.S. transshipments—primarily of corn—that are stored temporarily in Canada to take advantage of the St. Lawrence Seaway. It could, according to some port officials, lead to an increase of 40 percent in grain handled at Montreal and 80 percent at Quebec.

As a result of the change, public elevators at Montreal may store 2.5 million bushels of U.S. grain during November 1-15 and 1.5 million during November 16-23.

For Quebec, the limit is two grain cargoes (which average between 650,000 and 750,000 bu. each) at any time from November 1 to 15 and one cargo after that. In both ports, all U.S. grain must be cleared by the end of November, and the partial relaxation of the restrictions is subject to cancellation if it interferes with commitments of the Canadian Wheat Board.

The National Harbours Board reportedly hopes that this experiment will lead to complete elimination of the fall and spring restrictions against storage of U.S. wheat by government-owned elevators, which the Board operates. The Board wants the opportunity to function on the same basis as the private elevators along the St. Lawrence River, which are not subject to the restrictions.

In addition, shippers and brokers want flexibility of supplies to fill orders that require parcels of U.S. grain along with Canadian grain.

Switzerland Restores High Bread Grain Duties

Switzerland's customs duty on bread grains—which had been lowered to $1.36 per metric ton for the past 2 years—has been restored to its previous level of $6.80 per metric ton. The financial situation in Switzerland's Federal Treasury has made the restoration necessary; additional revenue derived from the increase may be $2.7 million per year.

The customs increase will affect the selling price of domestic bread grains for government sales to millers, but the increase will not be felt before October 1, 1967, since government prices for domestic grains are based on the average prices of equivalent grains during the preceding 12-month period.

The duty had been lowered in October 1964 to maintain stable flour prices for a 2-year period, thus helping to stabilize the standard of living. Because flour prices remained steady, bread prices did not go up. During 1965-66, however, some bakers' organizations increased bread prices to account for higher labor costs.

Lower Brazil Castorbean Output Expected

Brazil's 1966 castorbean production is estimated at 230,000 to 240,000 metric tons, compared with 265,000 tons harvested in 1965 and the record outturn of 400,000 tons in 1964. A substantial reduction in the São Paulo-Paraná area reportedly is the main reason for the decline from last year's outturn. Prospects are for a sufficient increase in Bahia, the major producing state, to offset reduced production in Pernambuco, the second largest producer, and in other northeastern states.

The last major harvesting period in Brazil, usually in March-April, was delayed considerably both in the northeast regions and in São Paulo-Paraná because of excessive rains in the former (particularly Pernambuco-Sergipe-Alagôas). Another factor which delayed harvest was unusual competition from producers of other crops for regular and migrant harvest workers in São Paulo-Paraná. Moreover, there reportedly was substantial frost damage to the Paraná crop and some to the São Paulo crop.

Castorbean prices to producers are favorable in the Central area and somewhat more so in the Northeast where beans have a higher yield of oil. These favorable prices are expected to stimulate increased plantings for the 1967 harvest. Moreover, some coffee producers in the central States, whose coffee trees were damaged by recent frost, probably will plant castorbeans between rows of damaged trees. Finally, the government's new program of eradication and diversification from coffee to other commodities allows castorbeans to qualify as an alternative crop. However, current free-market prices for soybeans, other beans, corn, and cassava are especially attractive to farmers in all regions. The trade believes that many coffee farmers and other farmers in São Paulo-Paraná, who would otherwise consider planting castorbeans and who did so after the coffee frost and drought of 1963, will be particularly attracted now by soybean prices.

In view of these various factors, castorbean production in 1967 may be expected to recover somewhat from this year's reduced level but probably may not exceed the 1965 outturn.

It is not expected that castor oil exports from Brazil in calendar 1966 will significantly exceed 100,000 tons. Preliminary data show exports through August 21 at 48,486 tons, valued at $10.7 million. The trade believes that exports will pick up considerably during the remainder of the year. Brazil's castor oil exports in 1965 reached a record 140,152 tons.

Japan's Soybean Imports Up One-Fourth

Japan's imports of soybeans during January-August 1966 were sharply above the level of the comparable period last year. Imports of safflowerseed were virtually the same as last year's, but those of soybean cake and meal were down sharply.

Soybean imports, at 1.5 million metric tons (54.0 million bu.), were almost one-fourth above the tonnage taken in the first 8 months of 1965. Of the total, 1.2 million tons (44.2 million bu.) were from the United States and most of the remainder from Mainland China. Imports of U.S. beans increased 35 percent, while those from Mainland China declined 11 percent.

There were no imports of safflowerseed in August. Imports during January-August, largely from the United States, totaled 44,326 tons, slightly below last year's level.

Only 7,071 tons of soybean cake and meal (6,629 from the United States) were imported through August, compared with 29,065 tons in the same period of 1965.

JAPAN'S IMPORTS OF SOYBEANS, SAFFLOWERSEED, AND SOYBEAN MEAL

Commodity and major source	1965	January-August 1965	January-August 1966
	1,000 metric tons	*1,000 metric tons*	*1,000 metric tons*
Soybeans:			
United States	1,464.9	890.0	1,202.4
Total	1,847.5	1,190.9	1,468.3
Safflowerseed:			
United States	112.7	43.9	43.7
Total	113.4	44.6	44.3
Soybean cake and meal:			
United States	41.7	29.0	6.6
Total	46.3	29.0	7.1

Customs Bureau, Ministry of Finance.

Chile's Fishmeal and Oil Production Increases

Chilean production of fishmeal during the January-August period of 1966 amounted to 169,200 metric tons, markedly above the 93,100 tons produced in 1965 and nearly equal to the record 174,700 tons produced in 1964. Fish oil production in 1966 through August reached 16,600 tons, sharply above the 10,400 tons produced in 1965, and approached the 17,600 tons produced in 1964. The increase reflects a larger catch following the return of the anchoveta in December 1965. Although prices are lower than last year's, export earnings for fish oil and meal in 1966 will be substantially above those in 1965.

In 1965 exports of fishmeal and oil totaled 66,935 and 7,942 tons, respectively—sharply below the 146,450 and 13,710 tons exported in 1964. This decline reflected a marked reduction in the fish catch as a result of the anchoveta shortage. The cause most generally cited for the shortage was increased water temperatures due to a warm current. Because of the shortage of anchoveta, the Chilean Government enacted a decree on March 4, 1966, which prohibits the "extraction, sale, purchase, transport and possession" of anchoveta less than 12 centimeters in length. However, a 20-percent tolerance in the catch is allowed.

Philippine Exports of Coconut Products

Registered exports of copra and coconut oil from the Philippine Republic during January-September 1966 totaled 671,747 long tons, oil-equivalent basis—26 percent above the 534,901 registered in 1965.

Exports of copra totaled 697,982 tons compared with 583,067 in 1965. Exports of coconut oil totaled 225,039, compared with 161,738 last year.

Exports of desiccated coconut during September 1966 totaled 8,404 short tons. January-September exports were 51,843 tons, 510 tons below the same period a year ago.

Of the total, 70 percent moved to the United States compared with 78 percent in the first 9 months of last year.

PHILIPPINE REGISTERED EXPORTS OF COPRA AND COCONUT OIL

Commodity and destination	September 1965	September 1966[1]	January-September 1965	January-September 1966[1]
	Long tons	Long tons	Long tons	Long tons
COPRA:				
United States	28,550	20,250	194,676	208,633
Europe	70,166	60,600	352,647	430,343
South America	4,144	500	10,644	21,751
Japan	6,400	300	23,100	33,800
Middle East	......	......	1,500	2,155
Other Asia	......	......	500	......
Africa	......	......	......	1,300
Total	109,260	81,650	583,067	697,982
COCONUT OIL:				
United States	18,883	18,229	125,295	178,014
Europe	2,972	9,314	36,034	45,041
South Africa	409	520	409	1,984
Total	22,264	28,063	161,738	225,039

[1]Preliminary.
Source: Associated Steamship Lines, Inc., Manila.

Western Europe To Slaughter Fewer Hogs

Western Europe is expected to slaughter 2.5 million fewer hogs this winter, a decline of 6 percent from last winter's level. The drop for the October-March period will be more pronounced—about 10 percent or 2 million head—in countries outside the Common Market.

Likely to suffer most from the overall decline are the importing countries—the United Kingdom, Switzerland, Austria, France, and West Germany. Likely to gain some is the United States, which could score some increase in exports of pork byproducts, mostly lard and offals, to Western Europe in 1966-67.

Imports from Eastern Europe, especially by France, Italy, and Austria, are running above expectations despite substantially reduced hog numbers in that region. Denmark will likely export less canned pork to the United States as U.S. supplies increase. Nevertheless, supplies in Western Europe will not recover for several months, and prices are expected to remain high.

With pork prices relatively high and beef prices relatively low, consumers are expected to substitute some beef for pork. Only France saw lower prices in September, as domestic supplies increased slightly in August-September and July-August imports of pork and live hogs were up 60 percent over those of the comparable 1965 period. The short supply situation will not permit much of an increase in West Germany's imports despite a $1.13 per hundredweight reduction in import levies, effective October 1. However, some signs point to increased production in Belgium and the Netherlands next spring.

Italy Has Short Walnut Crop

Preliminary estimates place Italy's 1966 commercial walnut crop at only 17,000 short tons in-shell basis. This would be down 21 percent from last year's crop and 32 percent below average. It appears to be the smallest outturn since 1957, when only 13,000 tons were harvested.

Exports are forecast at 9,000 tons in-shell basis for the marketing year beginning October 1, 1966. According to preliminary data, 1965-66 exports totaled 15,000 tons—6 percent above average. About 90 percent of the sales were in-shell; over half of these went to West Germany. Because of the poor 1965 French crop, Italy exported over 2,000 tons to that market—the first significant sales in recent years.

ITALY'S COMMERCIAL WALNUT SUPPLY AND DISTRIBUTION
[In-shell basis[1]]

Item	Average 1960-64	1964-65	1965-66[2]	1966-67[3]
	1,000 short tons	1,000 short tons	1,000 short tons	1,000 short tons
SUPPLY				
Beginning stocks (Oct. 1)	3.2	5.0	1.5	0.5
Production	24.9	20.0	21.5	17.0
Imports	.1	....	.3	.5
Total supply	28.2	25.0	23.3	18.0
DISTRIBUTION				
Exports	14.1	9.9	15.0	9.0
Domestic disappearance	10.6	13.6	7.8	9.0
Ending stocks (Sept. 30)	3.5	1.5	.5	....
Total distribution	28.2	25.0	23.3	18.0

[1]Shelled data converted to in-shell basis at 2.5:1. [2]Preliminary. [3]Forecast.

Denmark Exports New Kind of Cheese

The outlook for increasing exports of Danish dairy products to the United States seems to be good at present, particularly for Colby (in Danish "Coldby") cheese, similar to English cheddar. On an experimental basis, Colby cheese has been processed by the large dairy association "Sønderjylland East." The Cheese Export Board, which has been searching for new markets, found a favorable reception for the cheese in the United States.

Unlike the Colby exported by other countries for processing in the United States, Danish Colby is a table cheese.

Because Danish cheese production has exceeded the market possibilities in Denmark for the last year, the Danish Dairies Cheese Association introduced a voluntary regulation of cheese production which will be in effect until the end of June. Attempts to put through a new voluntary regulation of output after July 1 have been unsuccessful.

EEC Increases Levies on Whole Chickens

On October 20 the EEC Commission increased the supplemental levies on type I and II whole chickens from 5.7 cents to 6.8 cents per pound. On type III whole chickens the levy was raised from 4.5 cents to 5.7 cents per pound. Total import charges into West Germany were consequently raised to nearly 16 cents per pound on ready-to-cook broilers and stewers and to about 15½ cents per pound on ready-to-cook grillers (broilers without giblets). The higher rates went into effect October 24.

New Zealand's Butter Exports Decline

New Zealand's exports of butter for the year ended June 30, 1966, at 413 million pounds, were about 2 percent below those of the preceding year. Smaller sales to the United Kingdom—373 million pounds compared with 392 million pounds in 1964-65—accounted for this decline. There was some increase in sales to other markets, particularly to the Republic of South Africa which took 22 million pounds, 12 million pounds more than last year. Slightly larger shipments were made to Peru, West Germany, and Hong Kong.

Exports of cheese rose 2 percent to 213 million pounds,

in spite of reduced demand from the United Kingdom, which purchased 167 million pounds, 13 million pounds less than last year. Slightly larger shipments were made to a number of other markets. Among these were the United States, which increased its purchases 9 million pounds to 18 million; West Germany, up 5 million to 9 million; and Japan, up 2 million to 5 million.

Nonfat dry milk exports rose 11 percent to 165 million pounds, a new record. The increase is attributed to the demand by a number of countries which use this product in recombining. Countries which made larger purchases of nonfat dry milk in 1965-66 than in 1964-65 included Malaysia, which took 17 million pounds, compared with 6 million pounds last year; Japan—14 million (6 million); Pakistan—4 million (2 million); and the Republic of South Africa—2 million (1 million).

The United Kingdom's purchases, at 52 million pounds, were 23 million less than last year. Somewhat smaller quantities of nonfat dry milk were shipped to Peru, the Philippine Republic, Ceylon, and Hong Kong in 1965-66 than the year earlier.

Switzerland Selling More Cheese

Switzerland exported 40 million pounds of cheese in the first half of 1966, 5 million pounds more than in the corresponding period of 1965. Sales to Italy, the most important market, were up 19 percent to 14 million pounds. The United States increased its purchases by 1 million to 5 million. Of the remainder, 42 percent went to countries in the EEC, the same as a year ago.

Imports of cheese, at 14 million pounds, were up slightly from 1965; almost half came from France. Italy supplied approximately 4 million in both years, the Netherlands and Denmark approximately 1 million each in both years.

Butter imports during January-June 1966 rose 26 percent to 3 million pounds, supplied entirely by European sources. There was no trade with the United States, which in January-June 1965 accounted for 88 percent of total butter imports.

Portugal's Tobacco Imports

Portugal's imports of unmanufactured tobacco in the first half of 1966, at 6.4 million pounds, were a little above those of January-June 1965. Larger purchases of leaf from the United States, Angola, and Mozambique more than offset drops in imports from Greece and Rhodesia-Zambia-Malawi.

PORTUGAL'S TOBACCO IMPORTS

Origin	January-June		
	1964	1965	1966
	1,000 pounds	*1,000 pounds*	*1,000 pounds*
United States	3,061	2,363	2,422
Angola	1,027	916	1,099
Mozambique	566	660	903
Rhodesia-Zambia-Malawi	585	970	658
Greece	551	484	175
Others	819	949	1,184
Total	6,609	6,342	6,441

Taiwan's Cigarette Output Down

Cigarette output in Taiwan during the first half of 1966 totaled 6,460 million pieces, down 1.4 percent from the 6,549 million produced during the same period last year. Production of cigars dropped to 84,400 pieces from 161,600 pieces for January-June 1965. Also, the output of cut tobacco, at 227,000 pounds, was 35.4 percent below the 351,600 pounds produced during the first 6 months of last year.

Brazil Emphasizes Coffee Diversification

Brazil's coffee eradication and diversification program (modified in August 1966) is getting underway, with good prospects of being effective. Several factors contributing to its effectiveness include: (1) Firm adherence by the Administration to its original support price decision; (2) the anticipated reduction in the 1967-68 crop due to the recent frost and dry weather conditions; (3) large losses in the current crop due to insect damage. Because of the losses, funds will be made available for the program which would otherwise have been spent for purchasing, handling, and storing surplus coffee. Additionally, the recent increases in basic food crop support prices, which were widely announced ahead of planting time, and the currently strong price for these crops due to the short harvest this year, have increased incentives for farmers to plant them.

The recent frost and dry weather will substantially boost coffee growers' receptiveness to eradicating damaged coffee trees and diversifying to basic food crops and others. Crops that may be substituted for coffee are corn, rice, beans, castor beans, sunflower, soybeans, peanuts, cotton, manioc, wheat, forage crops, tobacco, and such perennial crops as citrus, avocado, mango, pecans, bananas, ramie, phormium, tung nuts, peppermint, and other commercial fruit or forest crops, as well as other crops that may be approved by the Brazilian Coffee Institute. There is said to be a reasonable possibility that producing trees will be reduced from about 3.4 billion to about 2.5 billion in the next 2 years.

Hard Fibers Study Group Meets in Rome

The first meeting of the Study Group on Hard Fibers was held in Rome several weeks ago. Eighteen countries, including the United States, sent accredited delegations, while 13, including Cuba, had observers. Elected as chairman and first and second vice-chairman respectively were D. Chaumeb (France), J. S. Kasambala (Tanzania), and J. A. Seixas Correa (Brazil).

The three principal fibers that were discussed were sisal, henequen, and abaca. Prices in general in 1966 will be no higher than those of 1965; sisal should show a marked increase in production while henequen will remain the same and abaca decline.

Because of the expected increased use of manmade fibers, it is forecast that by 1975 there may be considerable overproduction, according to a provisional study by FAO Secretariat.

In order to maintain a reasonable market, the group examined the impact of synthetics competition on hard fibers, shorter and longer term approaches to stabilization of world hard fibers market, the need to improve hard fiber statistics, and the coordination of research activities.

Looking ahead to its second session, which will be held towards the end of 1967 in the Philippines, the study group suggested that six topics be looked into carefully by each country and reports and findings be made at that second session. The six topics are: (1) the impact of

manmade fibers, particularly polypropylene, on the world hard fiber market; (2) possible approaches to medium and longer term stabilization of hard fiber markets; (3) collation of information on worldwide research looking for new uses; (4) the possible review of grading practices; (5) development of statistical information; and (6) preparation of the final version of the studv of prospects for 1975.

U.S. Cotton Exports Up Sharply

Exports of U.S. cotton amounted to 689,000 running bales in the first 2 months (August-September) of the 1966-67 season. This was double the 344,000 running bales exported in the same months a year earlier. Exports in September amounted to 348,000 bales, compared with 226,000 bales in the same month a year earlier.

U.S. COTTON EXPORTS BY DESTINATION
[Running bales]

Country of destination	Year beginning August 1				
	Average 1955-59	1964	1965	August-September 1965	August-September 1966
	1,000 bales	*1,000 bales*	*1,000 bales*	*1,000 bales*	*1,000 bales*
Austria	33	11	3	1	([1])
Belgium-Lux	160	80	43	11	11
Denmark	17	6	7	1	1
Finland	22	11	8	([1])	3
France	360	184	108	17	25
Germany, West	475	217	92	19	39
Italy	416	260	102	14	49
Netherlands	124	65	38	2	3
Norway	10	13	10	2	2
Poland & Danzig	85	66	42	9	1
Portugal	28	22	6	([1])	0
Spain	171	28	10	2	([1])
Sweden	75	58	59	9	12
Switzerland	64	66	35	8	15
United Kingdom	525	153	131	15	23
Yugoslavia	108	109	169	1	1
Other Europe	17	11	12	2	1
Total Europe	2,690	1,360	875	113	186
Australia	54	60	33	4	1
Canada	217	390	269	31	28
Chile	35	1	3	0	0
Colombia	33	1	57	0	1
Cuba	27	0	0	0	0
Ethiopia	4	4	20	2	([1])
Hong Kong	134	150	94	13	37
India	184	243	63	9	16
Indonesia	30	47	([1])	0	31
Iraq	0	0	0	0	0
Israel	16	23	5	2	1
Japan	1,154	990	705	59	232
Korea, Rep. of	205	261	301	44	54
Morocco	10	12	12	2	([1])
Pakistan	14	9	6	([1])	([1])
Philippines	64	75	93	8	22
South Africa	26	43	27	5	6
Taiwan(Formosa)	153	203	178	14	48
Thailand	4	55	55	11	12
Uruguay	15	0	([1])	0	0
Venezuela	2	6	5	1	0
Vietnam[2]	2	63	73	18	1
Other countries	27	64	68	8	13
Total	5,100	4,060	2,942	344	689

[1]Less than 500 bales. [2]Indochina prior to 1958. Includes Laos and Cambodia.

Canadian Cotton Use Lower

Canadian textile mills opened 30,188 bales (480 lb. net) of cotton in August, compared with 39,759 bales in August 1965, according to the Canadian Textiles Institute. The reduced openings in the month of August reflected the effects of a prolonged strike in several mills in Quebec.

Nicaragua's 1966-67 Cotton Crop May Be Larger

The 1966-67 cotton crop in Nicaragua may reach 550,000 bales (480 lb. net), well above the 1965-66 crop of 505,000 bales, but slightly below the record 1964-65 crop of 565,000 bales. The area registered for the 1966-67 crop is 350,000 acres, 9 percent less than planted area in 1965-66. Weather thus far has been ideal, and for that reason production is expected to exceed last season's level, despite the decline in planted area. Drought was responsible for a sharp decline in yields in 1965-66.

Cotton exports in the first half of 1965-66 (August-January), amounted to 56,000 bales, down sharply from the 74,000 bales shipped in the same months of 1965-66. Principal destinations for 1964-65 exports were Japan, West Germany, France, Italy, Formosa, and the United Kingdom.

Cotton consumption in Nicaragua continues fairly stable at about 10,000 bales per year. Stocks on hand August 1 were estimated at about 30,000 bales.

India Reduces Cotton Export Duty

The Government of India lowered the export duty on Bengal Desi cotton from the previous level of 1,000 rupees to 750 rupees per metric ton effective October 14. The duty on Zodas, Yellow pickings and Assam-Comillas was reduced from 750 to 550 rupees per ton. The duty was reduced to improve the competitive position of Indian Desi cotton with Pakistan-grown Desi, and also, as a realistic measure in view of the large carryover of Desi cottons from the 1965-66 crop. The new duty of 750 rupees per ton is equivalent to U.S. $100 per metric ton of lint cotton (about 4.5 U.S. cents per lb.).

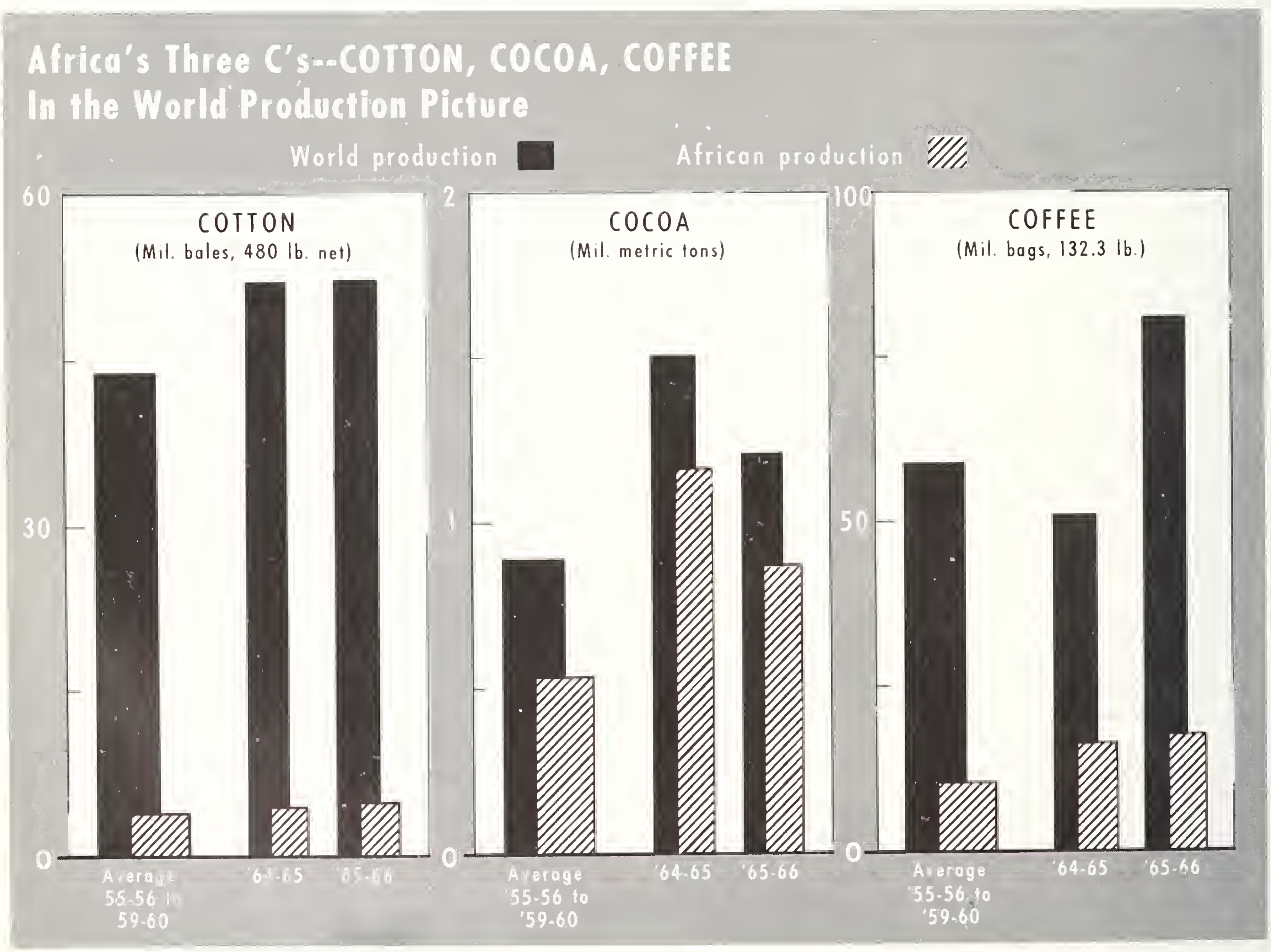
WORLD CROPS AND MARKETS INDEX

U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C. 20250

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE

To change your address or stop mailing, tear off this sheet and send to Foreign Agricultural Service, U.S. Dept. of Agriculture, Rm. 5918, Washington, D.C. 20250.



☆ U. S. GOVERNMENT PRINTING OFFICE : 1966 251-800/17